



THE EIGHTY-FIRST  
**ANNUAL REPORT**  
UPON THE  
**HEALTH OF LEICESTER**  
FOR THE YEAR 1929

BY  
**C. KILLICK MILLARD, M.D., D.Sc.**  
MEDICAL OFFICER OF HEALTH.

INCLUDING  
REPORT of the TUBERCULOSIS OFFICER.  
REPORT on the CITY HOSPITAL and SANATORIUM.  
REPORT of the CITY ANALYST.  
REPORT of the CHIEF SANITARY INSPECTOR.  
REPORTS on the V.D. CLINICS.

LEICESTER:  
LEICESTER CO-OPERATIVE PRINTING SOCIETY LIMITED, 99 CHURCH GATE.





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# Staff of the Health Department.

(As constituted January 1st, 1930.)

**MEDICAL OFFICER OF HEALTH:** C. KILLICK MILLARD, M.D., D.S.C.

## ASSISTANT MEDICAL OFFICERS.

<i>Tuberculosis Officer and Assistant M.O.H.</i>	..	WYVILLE S. THOMSON, M.D., D.P.H.
<i>Assist. Tuberculosis Officer</i>	..	E. G. LAWRIE, M.B.
<i>Medical. Supt. City Hospital and Sanatorium</i>	..	H. STANLEY BANKS, M.D., D.P.H.
<i>Assist. Medical Officers</i>	..	{ J. C. MACKENZIE, M.D.
	..	{ S. R. WILSON, M.B., CH.B. (since resigned).
<i>Maternity and Child Welfare Officer</i>	..	E. B. B. HUMPHREYS, M.B., CH.B.

**SECRETARY OF HEALTH DEPARTMENT:** WILFRID CARR.

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<i>Maternity Home</i>	..	EDITH BRADSHAW. 10 12
<i>Day Nursery</i>	..	ALICE M. MASON. 12

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<i>Assist. to Public Analyst</i>	..	J. G. LUNT, B.S.C., A.I.C.
<i>Laboratory Assistant</i>	..	J. L. PINDER.

## SANITARY INSPECTORS.

<i>Chief Inspector</i>	..	F. G. McHUGH. 1 2 3 5
<i>Inspectors—</i>		
S. W. BARKER. 5 6		W. MUSTON. 1 2
W. W. BAUM. 1 2 3 4 8		J. W. NORTH. 1 2
S. BEEVER. 1 2		T. PARRY. 1 2
R. T. BLAYLOCK. 1 2 3 9		W. J. PARKINSON. 1 2 7
M. C. CRIPPS. 1 2		A. T. PRICE. 1 2
J. ECKERSLEY. 1 2		F. SOWERBUTTS. 1 2 5 6 (since deceased)
H. ELKINGTON. 2 5		M. TYLDESLEY. 1 2 5
W. C. LONG. 1 2		E. THOMPSON. 1 2


## HEALTH VISITORS.

<i>Superintendent</i>	..	MRS. REED. 10 11
<i>District Health Visitors—</i>		
Miss L. CHAMBERS. 10 12		Miss E. R. MATTHEWS. 10 12
„ M. CONLON. 10 12 14		„ L. WALKER. 10
„ E. M. CRAGG. 10 11 12		Mrs. M. E. WILLIAMS. 10 (part time).
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„ A. KAVANAGH. 10 12 14		„ E. L. WOLLASTON. 10 12
„ D. L. MALLISON. 10 12 14		„ L. WRIGHT. 10 11 13
„ J. G. MASTERS. 10 11		
<i>Manageress of Milk Depot.</i>	..	MRS. E. STANION. 11
<i>Tuberculosis Nurses</i>	..	Miss F. BEASLEY. 10 12
	..	„ E. MOUND. 10 12
	..	„ C. NEILL. 12

## CLERICAL STAFF.

<i>Chief Clerk, Sanitary Office</i>	..	T. P. POYNOR.
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		„ R. BREWARD.
<i>Tuberculosis Dispensary</i>	..	Miss J. HEATON.
	..	„ E. E. BATTLE.
<i>City Hospital and Sanatorium</i>	..	Mrs. ADAMS.
	..	Miss E. GALLIARD.

1. Holds Sanitary Inspector's Certif. Roy. San. Inst.
2. Holds Meat and Food Inspector's Certif. Roy. San. Inst.
3. Holds Certif. of Roy. San. Inst. for San. Science as applied to Buildings and Public Works.
4. Holds Smoke Inspector's Certif. of the Roy. San. Inst.
5. Holds Sanitary Inspector's Certif. under Public Health (London) Act, 1891.
6. Holds Meat and Food Inspector's Certif. under Public Health (London) Act, 1891.
7. Holds Sanitary Inspector's Certif. San. Inspectors' Asscn.
8. Holds Certif. of Roy. San. Inst. for Advanced Knowledge in Inspectors' Duties.
9. Holds Certif. of Incorp'd. San. Asscn. of Scotland for Meat and other Goods.
10. Holds Certif. of the Central Midwives' Board.
11. Holds Health Visitor's Certif. of the Roy. San. Inst.
12. Holds Certif. as fully Trained Nurse.
13. Holds Certif. for Maternity and Child Welfare Workers of the Roy. San. Inst.
14. Holds new Health Visitors' Certificate.



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## CITY OF LEICESTER.

# HEALTH COMMITTEE.

### Chairman.

THE LORD MAYOR (MR. W. E. HINCKS, O.B.E., J.P.)

### Vice-Chairman.

MR. PARBURY.

MR. ADAMS.	ALD. HAND, J.P.	MR. W. H. SMITH.
" CANNER.	MR. HARRISON, J.P.	MRS. SWAINSTON.
" CHAPPIN.	" JACKSON.	MR. J. M. WALKER.
" CORT.	" JOHNSON.	ALD. T. W. WALKER, J.P.
Miss FORTEY, J.P., B.Sc.	" C. E. KEENE.	" WILFORD, J.P.
" FRISBY, J.P.	" RICHARDS.	" WINDLEY, J.P.

The Committee meets every alternate Friday in the Committee Room, Town Hall, at 3.30 p.m.

The Health Committee, together with the following co-opted members, not being members of the Town Council, constitute the Statutory Maternity and Child Welfare Committee:—Mrs. Banton, Mrs. Cooper, Mrs. Taylor, Miss E. J. Windley, B.A.

### Accounts Sub-Committee.

MR. CANNER.	MRS. SWAINSTON.	ALD. WILFORD.
" HARRISON.		

### Isolation Hospital and Dispensary Sub-Committee.

THE LORD MAYOR (Chairman).	MR. JOHNSON.	MR. J. M. WALKER.
MR. CORT.	" C. E. KEENE.	ALD. T. W. WALKER.
Miss FORTEY.	" PARBURY.	" WILFORD.
MR. JACKSON.	" RICHARDS.	" WINDLEY.

### Health Inspection Sub-Committee.

THE LORD MAYOR.	Miss FORTEY.	MR. W. H. SMITH.
MR. CORT (Chairman).	" FRISBY.	" J. M. WALKER.
" ADAMS.	MR. JOHNSON.	ALD. T. W. WALKER.
" CHAPPIN.	" PARBURY.	

### Maternity and Child Welfare Sub-Committee.

THE LORD MAYOR.	Miss FORTEY.	MR. RICHARDS.
MR. PARBURY (Chairman).	" FRISBY.	MRS. L. TAYLOR.
MRS. R. BANTON.	MR. JACKSON.	Miss E. J. WINDLEY.
" A. COOPER.	" JOHNSON.	

### Maternity Home and Day Nursery Management Sub-Committee.

THE LORD MAYOR.	Miss FORTEY.	ALD. WINDLEY.
ALD. HAND (Chairman).	" FRISBY.	Miss WINDLEY.
MRS. BANTON.	MR. PARBURY.	
" COOPER.	MRS. TAYLOR.	

### Venereal Diseases Sub-Committee.

THE LORD MAYOR.	MR. W. H. SMITH.	ALD. WILFORD.
Miss FORTEY.	MRS. SWAINSTON.	" WINDLEY.
MR. JOHNSON.	MR. J. M. WALKER.	
" PARBURY.	ALD. T. W. WALKER.	

### General Purposes Sub-Committee.

THE LORD MAYOR (Chairman).	MR. JOHNSON.	MRS. SWAINSTON.
Miss FORTEY.	" C. E. KEENE.	ALD. T. W. WALKER.
ALD. HAND.	" PARBURY.	" WILFORD.

### Necessitous Cases Sub-Committee.

MRS. COOPER (Chairman).	MR. RICHARDS.
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# SUMMARY OF STATISTICS

## FOR THE YEAR 1929.

### CITY OF LEICESTER.

Population at Census, 1921	..	..	..	234,143
„ (estimated) at Mid-year 1929	..	..	..	245,200
Marriages	..	..	..	2,351
Marriage-rate	..	..	..	19.17
Births	..	..	..	3,747
Birth-rate	..	..	..	15.28
Deaths (corrected for transferable deaths)	..	..	..	3,417
Death-rate	..	..	..	13.93
Deaths under One Year	..	..	..	301
Infant Mortality (per 1,000 Births)	..	..	..	80.33
Zymotic-rate	..	..	..	1.42
Diarrhoea-rate	..	..	..	.11
Respiratory-rate	..	..	..	2.15
Cancer-rate	..	..	..	1.45
Tuberculosis-rate	..	..	..	1.30
Phthisis-rate	..	..	..	1.08

Area of City (in acres)	..	..	..	8,582
Number of persons per acre at Census, 1921	..	..	..	27.2
Number of persons per Tenement at Census, 1921	..	..	..	4.28
Number of Inhabited Tenements, Census, 1921	..	..	..	54,657
Number of Inhabited Tenements, January, 1930	..	..	..	62,038
Number of Empty Houses, January, 1930	..	..	..	370
Number of Empty Cottages, January, 1930	..	..	..	99
Rateable value (1st November, 1929)	..	..	..	£1,574,790

Reduced owing to de-rating. Provisional figure.

Rates in the £:	1928-29		1929-30	
	s.	d.	s.	d.
Poor Rate	..	2 7	} 13	4
General District Rate	..	12 4		

England & Wales			107 Great Towns (Population exceeding 50,000)	London
(For comparison).				
Birth-rate	..	16.3	16.6	15.7
Death-rate	..	13.4	13.7	13.8
Infant Mortality (per 1,000 Births)	..	74	79	70

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HEALTH DEPARTMENT,  
GREY FRIARS,  
LEICESTER.

7th July, 1930.

*To the Chairman and Members of the Health Committee.*

MY LORD MAYOR, LADIES AND GENTLEMEN,

I beg to present the Annual Report on the Health of Leicester for the year 1929.

The death-rate was a little higher than usual, as was the case throughout the country, and is accounted for by the epidemic of influenza in the early part of the year. The infant mortality also showed a setback in keeping with a similar setback in other parts of England and Wales.

The marriage-rate continues to rise and the birth-rate continues to fall, but a partial explanation of this anomaly is suggested in the report.

Smallpox, of the minor variety, gave much trouble and is fully reported upon. Happily no deaths were caused by it during the year.

The great event of the year, from the point of view of public health legislation, was the passing of the Local Government Act, 1929. Your Committee decided to take full advantage of the Act by making a very complete "declaration" under Section 5. In this respect they were in advance of most other large towns. The effect of this decision has been that the North Evington Poor Law Infirmary has now become a Public Health Hospital and, under its new name of the "City General Hospital" is, it is believed and hoped, entering upon a new era of increased service to the citizens of Leicester. The work of the City General Hospital is not referred to in this report as the actual change-over to the Corporation did not take place during the year under review but on April 1st, 1930.

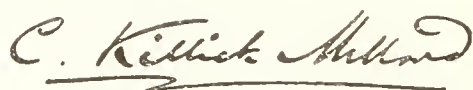
The work of the Health Committee continues to expand and to become more complex. Details will be found both in the body of the report and, more especially, in the Appendices, written by the Tuberculosis Officer (Dr. W. S. Thomson), the Medical Superintendent of the City Isolation Hospital and Sanatorium (Dr. H. Stanley Banks), the City Analyst (Mr. F. C. Bullock, B.Sc., F.I.C.), the Chief Sanitary Inspector (Mr. F. G. McHugh), and the Medical Officers in charge of the V.D. Clinics. All these departmental reports are carefully written and merit attention.

I would take this opportunity of expressing my appreciation of the work of the chief officers mentioned above, of our indefatigable Secretary (Mr. W. Carr), and of the other members of the Health Department Staff. I specially wish to thank the Sanitary Inspectors for the large amount of additional work entailed upon them in supervising many hundreds of smallpox contacts, work which has been willingly and efficiently performed, often after ordinary office hours.

To the Chairman (Councillor W. E. Hincks, O.B.E., J.P.)—who during the year had the great honour of being elected Lord Mayor—and to the individual members of the Health Committee I once again wish to tender my best thanks for their uniform courtesy and consideration.

I am, Ladies and Gentlemen,

Your obedient servant,

A handwritten signature in dark ink, reading "C. Killick Mollard". The signature is written in a cursive style with a long horizontal flourish underneath the name.

*Medical Officer of Health.*



# Medical Officer of Health's Report

## FOR THE YEAR 1929.

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### PART I.

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#### Population.

The Registrar General estimates the population of Leicester, as at the middle of 1929, to be 245,200. This is 800 less than for the previous year. The Registrar General's present method of estimating population is a complicated one, depending upon various factors including the number of persons on the electoral register. It appears to give rather erratic and unexpected results. Thus, during the past few years the population of Leicester as estimated by the Registrar General has sometimes shown an increase and sometimes a decrease, as follows :—

Year.		Population.	Increase.	Decrease.
1923	..	239,700	+ 900	—
1924	..	241,800	+2,100	—
1925	..	242,100	+ 300	—
1926	..	241,700	—	—400
1927	..	245,000	+3,300	—
1928	..	246,000	+1,000	—
1929	..	245,200	—	—800

It seems very improbable that the real population of Leicester should fluctuate in this manner, and therefore there is no need to attach too much importance to the above figures, though as they form the basis of our official statistics one could wish they were more consistent.

It is, of course, very probable that the population of the City proper is not now increasing much, because so many of the new houses being built for Leicester people are outside the City boundary.

Each Leicester family moving into one of these new houses reduces the population of Leicester to that extent and increases the population of the County.

I am informed that the estimated population of the County for last year shows an increase of 3,500, or a total increase during the past three years of 15,000, and that a very large part of this increase is in the areas immediately surrounding Leicester. A large part of the Park Housing Estate of the Corporation, and the greater part of the Braunstone Housing Estate, are in the County.

To put it tersely, Leicester, being now practically all built up, is overflowing her boundaries in all directions. Many thousands of Leicester people now live outside the City and pay their rates to local authorities in the County. Moreover, this process must inevitably continue until such time as the boundaries of Leicester are extended.

### Marriages.

The number of marriages solemnised in Leicester during the year was :—

In Church of England .. .. .	1,228
Elsewhere .. .. .	1,123
<hr/>	
Total .. .. .	2,351

This figure yields a marriage-rate per 1,000 of 19.17.

Following the Great War, there was, very naturally, a large increase in the marriage-rate in Leicester, the figure for 1919 being 21.3, and in 1920, 23.5. The rate then fell until, in 1926, it was only 16.9. Since then the figure has been rising again, but it has not been accompanied by a corresponding increase in the birth-rate; this is explicable by the modern revolt against large families.

Year.	Marriage-rate.	Birth-rate.
1926 .. .. .	16.9	17.0
1927 .. .. .	17.6	16.1
1928 .. .. .	18.9	16.2
1929 .. .. .	19.1	15.2

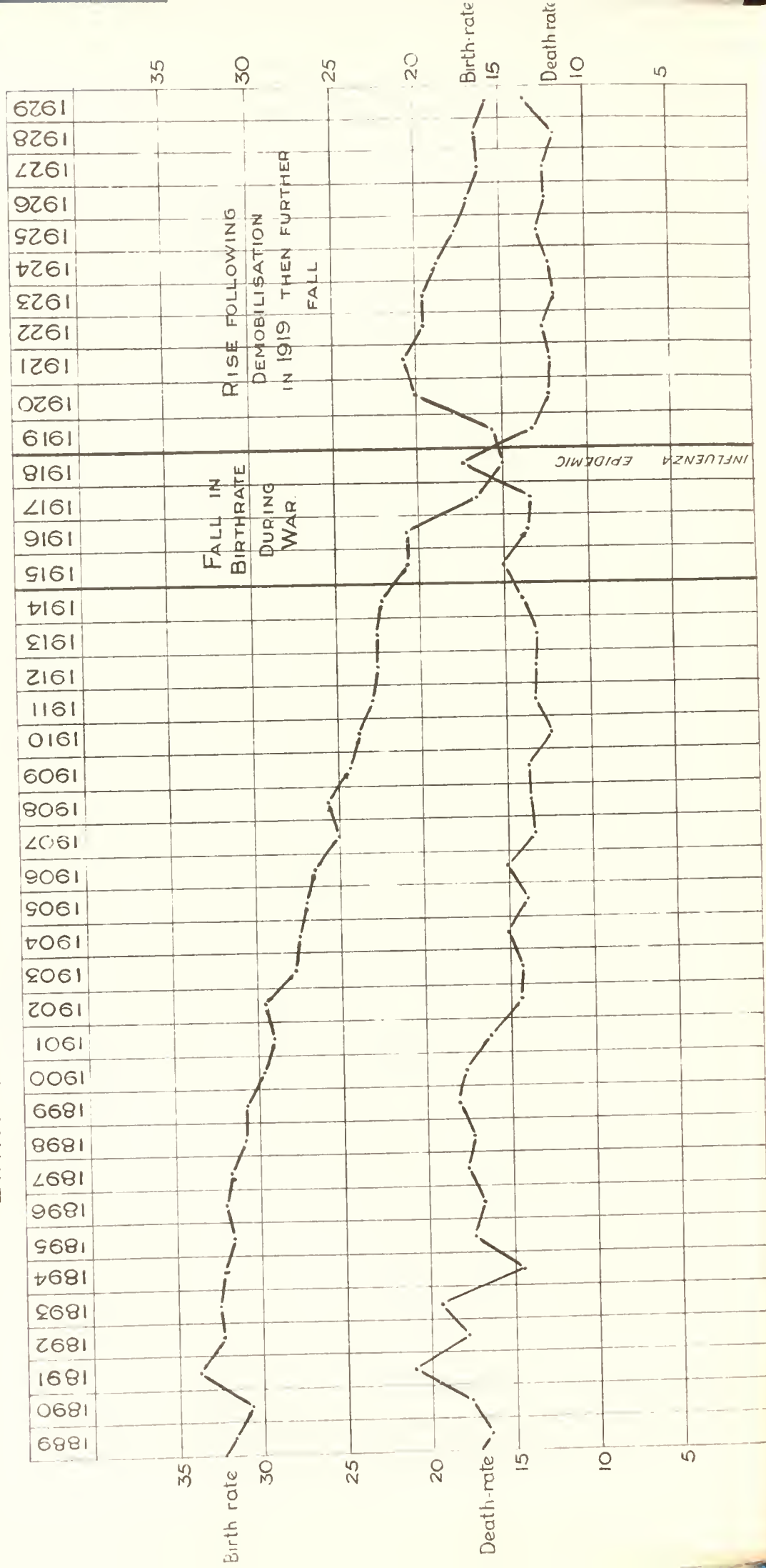
The birth-rate for 1920 (following demobilisation) was 24.9.

The marriage-rate for the whole country has been considerably below the Leicester figures, and has continued fairly steady in the neighbourhood of 15 and 16 per 1,000.



GRAPH I

# BIRTH AND DEATH RATES IN LEICESTER 1889-1929.



## **Births.**

The corrected number of births for the year was 3,747, of which 1,963 were males and 1,784 were females. This is 241 fewer than in the previous year. The birth-rate was 15.29, which is the lowest figure hitherto recorded with the exception of certain years during the War.

In this connection it must be remembered a large number of young married couples who get married in Leicester are now leaving Leicester in order to occupy houses just outside the City boundary, and this partly accounts for the fall in the number of births, in spite of the increased marriage-rate.

## **Still-Births.**

The number of still-births notified was 139, viz., 86 by midwives and 53 by doctors. The number of still-born children interred at the City cemeteries was 274, showing that a large proportion of still-births are not notified.

## **Illegitimacy.**

The number of illegitimate births was 233, equal to 6.2 per cent. of the total births. This is above the average, which is under 5 per cent.

## **Deaths.**

The number of deaths of persons belonging to Leicester, after making the usual corrections for institutional and transferable deaths, was 3,417, of which 1,673 were in males and 1,744 in females. The number is 669 more than in the previous year.

## **Death-rate.**

The death-rate was 13.94 per 1,000 of the estimated population, this being higher than usual, higher indeed than in any year since 1918. The increase is accounted for by the epidemic of influenza in the first quarter of the year. A similar increase in the death-rate occurred throughout the country generally, the figure for England and Wales being nearly two per thousand higher than in 1928.

## **Infant Mortality.**

The number of deaths of infants under one year of age was 301 as compared with 282 in 1928. This gives an infant mortality of 80.33 per 1,000 births, as compared with 70.71 in 1928. In that year the figure was the lowest ever recorded. This setback is naturally regrettable but is in keeping with the increase in the death-rate at all ages. Analysing the different causes of deaths

we find more deaths from whooping cough (11), bronchitis (7), pneumonia (18), and "other defined diseases" (13). On the other hand, certain diseases showed a reduction, e.g., diarrhœa (-15), and congenital debility, &c. (-16).

It is perhaps some consolation to know that a similar increase in infant mortality occurred throughout the country, the figure for the 107 large towns being 79 as against 70 in the previous year. The experience of Leicester, therefore, was in no way exceptional but was doubtless due to climatic and other conditions affecting the whole country, especially in the first quarter.

### **LEICESTER STATISTICS COMPARED WITH THOSE OF OTHER LARGE TOWNS.**

In Table 23 will be found the principal vital statistics of 38 large towns with populations over 100,000. As regards death-rate, Leicester comes about half-way, being slightly below the average. As regards infant mortality also, Leicester's figure comes near the middle, again being rather below the average.

As regards birth-rate, Leicester is well below the average, our figure being 15.2 as compared with an average figure of 17.0. Only nine of the 37 other large towns had a lower rate than Leicester. Remarkable differences exist. Thus, the highest rates were 23.6 in Middlesbrough, and 22.3 in Sunderland; whilst the lowest were 12.4 in Blackburn and 12.5 in Southend-on-Sea. If we exclude the latter as not being an industrial town we may put in place of it Huddersfield with 12.8. Why should Huddersfield have a birth-rate only a little more than half that of Middlesbrough? The M.O.H. for Huddersfield happens to be a strong and outspoken opponent of birth control, so that the cause of the low birth-rate in that city certainly cannot be attributed to him or to his teaching.

### **COMPARATIVE WARD STATISTICS.**

(See Table 2.)

Leicester is divided into 16 Municipal Wards varying greatly in character both geographically and socially. The more favoured wards are situated in the outskirts and to the south and south-west of the City. None of the wards are purely residential, though Knighton is largely so, as also, to a less extent, Westcotes, West Humberstone and Spiney Hill Wards. On the other hand, the least favoured wards, from the health point of view, are situated in the central and oldest part of the City, e.g., Newton, St. Margaret's and Wyggeston.



Considerable annual fluctuations occur in the principal vital statistics, and it is always a matter of interest to compare the wards.

Whilst the figures for each ward will be found in Table 2 at the end of this report, it is convenient to give here the figures for the wards with the highest and lowest rates.

**Ward Death-Rates.**

Highest.			Lowest.		
Wyggeston	..	19.5	Knighton	..	9.1
Wycliffe	..	18.4	Aylestone	..	9.4
The Castle	..	17.0	Spinney Hill		10.9
St. Margaret's	..	15.8	Westcotes	..	11.1

Wyggeston, which in the previous year had shown considerable improvement, has again gone back to its unenviable position as the ward with the highest death-rate. At one time this unenviable distinction was usually occupied by Newton Ward, but the latter has improved considerably in recent years and for two years in succession the death-rate has been only 14.2.

The Castle Ward with a death-rate of 17.0 comes out unusually badly.

Amongst the wards with the lowest death-rate we find Knighton, Spinney Hill and Westcotes, which is not surprising in view of the better social status of so many of the residents together with the superior housing conditions. It is satisfactory to find Aylestone, which is essentially a working-class ward, again so near the top. (In the previous year it was actually first with the lowest rate of all), but the presence of the Park Housing Estate, with some 2,000 selected families, is no doubt partly responsible for this favourable position. The population of the Park Estate, which probably approaches 8,000 to 10,000 in number, is largely made up of couples with children, and with very few old people. It is from the latter class, of course, that the death-rate is chiefly recruited.

**Ward Birth-Rates.**

Highest.			Lowest.		
Wyggeston	..	26.8	Wycliffe	..	9.1
St. Margaret's	..	18.8	Knighton	..	9.2
Aylestone	..	16.9	Latimer	..	10.4
Belgrave	..	15.9	Westcotes	..	11.2

### Ward Infant Mortality Rates.

Highest.			Lowest.		
Newton	..	169	Knighton	..	21
Latimer	..	163	St. Martin's		41*
St. Margaret's	..	135	Spinney Hill		55
Wyggeston	..	112	The Abbey	..	55

### Ward Phthisis Rate.

Highest.			Lowest.		
Wyggeston	..	2.08	Knighton	..	0.39
St. Margaret's	..	1.70	De Montfort		0.55
The Castle	..	1.12	Belgrave	..	0.64
Newton	..	1.02	W. Humberstone 0.90		
Westcotes	..				

The presence of Wyggeston, St. Margaret's and Newton Wards amongst the five wards with the highest phthisis rates is significant but hardly surprising. Poverty, or at least a low standard of life, and tuberculosis are well known to be correlated.

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\*The population of St. Martin's Ward is so small as to make this figure hardly reliable. Last year the figure for St. Martin's was 137.



## PART II.

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# Zymotic and other Specified Diseases or Causes of Death.

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### SMALLPOX (*Variola Minor*).

Cases during the year, 320. Deaths, nil.

In the last Annual Report it was stated that during 1928 smallpox, of the minor variety, had been introduced into the City after an absence of two years.

The outbreak of 1928 had begun in May of that year, having been introduced into the North Evington (Poor Law) Infirmary, by a tramp. That outbreak was not extinguished until May, 1929, i.e., the year under review.

Unfortunately, our freedom from the disease was short-lived, the disease being reintroduced at the end of July in the manner described below. A fresh and more extensive outbreak then developed which reached its maximum in March, 1930, and has not been extinguished at the time of writing (June).

The total number of cases reported during the year under review was 320, viz., from January 1st to May 17th, 107, these belonging to the 1928-29 outbreak, and from July 27th to December 31st, 213, these belonging to the 1929-30 outbreak. Including 90 cases which occurred in 1928, the total cases for the 1928-29 outbreak was 197. These cases were reported on in the last report. The circumstances under which the second outbreak originated were as follows.

On July 27th, a man (F.P.), age 35, living in Gwendolen Road, was reported as a suspected case of smallpox. The diagnosis was confirmed and on inquiries being made it was found that the man was employed at Shepshed, a place some 13 miles from Leicester. From information which the man gave it seemed probable that cases of smallpox were occurring at Shepshed although they were

not at the time officially recognised. The County Health Authorities were communicated with and the suspicion proved to be correct, and thereafter a considerable number of cases of a very mild character which had been previously regarded as chickenpox, were discovered by them.

No further cases occurred in Leicester until September when two cases were reported, one of these being a man who had been visiting a relation at Shepshed, and the other a woman who had been in contact with a case at Quorn which latter was indirectly connected with the Shepshed outbreak. A third case, also in September, was that of a commercial traveller whose work was chiefly in the County. Yet a further case was that of a child who had apparently been infected whilst staying away from Leicester. This case was not recognised as smallpox until she had infected two playmates. These four cases, all apparently imported, gave rise to further cases in October, and in November cases began to occur which could not be directly connected with the previous cases. Towards the latter part of November and in December the disease became more widely diffused, and it was then evident that we were in for an extensive outbreak. The maximum was reached in March, 1930, and it was not until June that real abatement set in.

### **Character of the Disease.**

The outstanding feature of the outbreak has been the extremely mild and favourable clinical type of the cases. Even those few cases that had a very profuse eruption made rapid and complete recoveries with little constitutional disturbance after the prodromal (pre-eruptive) stage, and with little or no permanent disfigurement.

The general course of an average case of the disease is as follows :—The persons attacked are taken suddenly ill, one of the most common and pronounced symptoms being severe headache. Other symptoms are pain at the bottom of the back, vomiting, or a feeling of sickness, and feverishness—usually accompanied by sweating—the temperature may be up to  $103^{\circ}$  or even  $104^{\circ}$ . These symptoms, which closely resemble those of influenza, continue for two or three or even four days, during which the patient is usually ill enough to have to stay in bed. Then the eruption begins to appear in the form of sparsely scattered “pimples” on the face and later on other parts of the body, and simultaneously, if not earlier, the constitutional symptoms completely pass off. The patient quickly feels quite well again and is apt to regard the appearance of the “pimples” as an indication that his blood is out of order. If not under a doctor he is very apt to think that there

is nothing serious the matter with him and it is not until the "pimples" get larger and become pustular—and not always then unless there happen to be a good many on the face—that suspicion is aroused; it is hardly surprising, therefore, that he is tempted to return to work. This has happened repeatedly and has conducted more than any other cause to the spread of the disease.

### **Infectivity.**

There is no doubt that the disease is highly infectious, and where people have been in close and prolonged contact, as in the case of the inmates of invaded households, the risk of catching the disease is very great. In several instances five or six and occasionally even more cases have been removed from the one house. The infectivity appears to vary rather inexplicably, and often when one has expected further cases to result none has occurred.

As an example of what does happen, the case of a young man (W.A.D.), age 19, may be quoted. He went to a dance the day after the eruption had appeared and although he did not dance he sat in the room watching the dancing for about three hours. There were probably nearly 80 persons in the room which was rather crowded, yet apparently only one of these contracted the disease. In another case a man suffering from smallpox (third day of the eruption) performed in the orchestra of a cinema at both afternoon and evening performances before full houses. In this case eight of those present contracted the disease. In the case of factories where an employee returns to work after the eruption has appeared and works in a room with say 30—50 others, the number of persons contracting the disease would probably be on an average three or four. Prior to the appearance of the eruption, even though patients are feeling ill, infectivity appears to be comparatively slight; indeed, for practical purposes we usually date the period of infectivity from the first day of the eruption. During the incubation period, i.e., prior to the appearance of any symptoms, there does not usually appear to be any infectivity.

### **Is Variola Minor true Smallpox ?**

A question of great practical importance is as to the real nature of this mild smallpox (*variola minor*). Is it true smallpox or not? Certainly, it differs profoundly in severity from the smallpox of former times, which was very fatal and disfiguring and was justly dreaded more than any other infectious disease. Yet when we come to consider the actual symptoms it is difficult to point to any important diagnostic feature which enables us to distinguish

in an individual case between the two varieties. If one only saw one case and knew nothing about its history or the cases which had preceded it I do not think that anyone, however expert in diagnosis, would be able to say definitely whether it was a case of major or minor smallpox. But with a series of cases little difficulty occurs.

The conclusion which the writer has come to is that variola minor is undoubtedly smallpox, but that it is a distinct variety from severe or Asiatic smallpox (v. major). Moreover, there appears to be no satisfactory evidence forthcoming either from this country or from the U.S.A. that the one variety of smallpox ever changes into the other. If this is correct—and it is a matter of the greatest possible practical importance that it should be definitely settled—it must affect our whole attitude towards the present mild variety.

When variola minor was first recognised in this country after the war, grave doubt existed as to whether it was really a fixed and distinct variety, and fearing that it might at any time revert to the virulent type, it was decided by the Ministry of Health that it must be treated on virtually the same lines as major smallpox.

A strong feeling now exists amongst medical officers of health that the time has come when this attitude should be reconsidered.

Some, indeed, think that variola minor is such a trifling disease that it is not worth the trouble and expense of trying to stamp it out. They argue that its name, "smallpox," is the worst thing about it, and that if it were given another name, e.g., "alastrim" (by which name it is known in some countries), it might be treated as being of little more importance than chickenpox.

There is a great deal to be said for such an argument, and although Leicester, in view of its exceptional history, would not perhaps be the best place to take the lead in this matter the writer would certainly like to see the experiment tried elsewhere.

It must be remembered that an extensive outbreak of variola minor would have one important and beneficial effect, viz., that it would confer a large measure of protection against any possible future outbreak of major smallpox, for there is good reason to believe that an attack of minor smallpox confers at least as much, and probably more lasting, protection against an attack of major smallpox as does vaccination, and the amount of constitutional disturbance caused by it is not much greater than that caused by vaccination. Even the eruption is little if any more objectionable than the local lesion caused by vaccination. So that everything considered quite

a good case can be made out in favour of not worrying too much even if "alastrim" does become established in this country and takes its place besides chickenpox and german measles as one of the recognised diseases which most people are liable to at some time or other in their lives.

### **Procedure adopted to control the Outbreak.**

Leicester being to an exceptional extent an un-vaccinated city, no reliance is placed upon the general vaccinal condition of the population. Nor is any attempt made to persuade the public, apart from persons who are known to have been in contact, to get vaccinated.

The writer's views on the general question of vaccination have so often been stated that it is not necessary to refer to this aspect of the question here.

As regards the vaccination of contacts, it has always been the practice in Leicester to advise close contacts to be vaccinated, except in cases where so much delay has occurred before a case has been discovered that the vaccination would probably be too late to be of any service.

A distinction is usually made between "household contacts," i.e., persons living in the house where a case of smallpox has been discovered, and "outside contacts," i.e., persons who have been in contact, but do not live in the same house—e.g., persons who have visited the patient's house or been visited by the patient at their own house. "Outside" contacts, unless exceptionally close contacts (e.g., persons who are "keeping company" with a case of smallpox), are not usually advised to get vaccinated.

"Household" contacts are almost always advised to get vaccinated, but in view of the very mild and non-fatal character of the present variety of smallpox the advice is not pressed as it used to be when we were dealing with major smallpox. The number of "household" contacts accepting vaccination is about 25—30 per cent.

The two main measures which we depend upon in Leicester for controlling smallpox are :—

- (1) Isolation, usually in hospital ;
- (2) Supervision of contacts.

Out of the 320 cases dealt with during the year only six cases were not removed to hospital. These were cases in which, owing to exceptional facilities for isolation at home, removal to hospital was not considered necessary.



With major smallpox isolation in hospital has for many years been regarded as very essential, but with minor smallpox this is one of the measures that might well be considered with a view to some relaxation.

I would suggest that the same procedure might well be followed as is now the case with scarlet fever. In the latter disease each case is treated on its merits. There is now no universal rule that cases of scarlet fever go to hospital. If circumstances permit of their being satisfactorily isolated at home, they are not removed. Thus, out of 517 cases of scarlet fever last year, 215 or 41 per cent. were treated at home.

In the case of chickenpox, or measles, or whooping cough, it is only very exceptional cases which are removed to hospital. From the point of view of loss of life and permanent injury to health, measles and whooping cough are, of course, infinitely more serious diseases than minor smallpox.

### **Surveillance of Contacts.**

The second important measure is the supervision of "contacts." The isolation of contacts in hospital was abandoned many years ago as impracticable. Even segregation of contacts in their own homes, accompanied by the payment of compensation for loss of wages, does not seem worth while with the present mild form, and is not now practised. This, I may say, is in keeping with the official advice of the Ministry of Health.

Our procedure now is as follows: Persons living in a house where a case of smallpox is discovered are asked to keep away from work (if employed indoors) for at least 24 hours after the case has been removed. In the meanwhile the house is disinfected and the contacts are advised to go out in the fresh air, and to abstain from visiting places of amusement, &c. Factory proprietors almost always accept this arrangement. One large firm, however, make it a rule that employees shall not return till the expiry of the full quarantine period, viz., three weeks, and during absence they have agreed to pay an allowance (I believe—half wages). This firm, however, have been rather fortunate and have not had to pay out very much on account of this arrangement.

Undoubtedly there is something to be said in favour of keeping contacts out of the factories during the quarantine period. During the present outbreak a good deal of spread has occurred in factories, and occasionally (though not often) this has been traceable to contacts under supervision.

The trouble is that the disease is often so trivial that contacts will not admit, possibly they do not believe, that they are ill.

Our procedure is for a sanitary inspector to visit contacts every day during the "observation period" (or every other day according to the circumstances). In the case of contacts who are at work he cannot always see them personally, and he therefore has to trust to the report as to their health given by the head of the household at home. On the whole the public of Leicester have co-operated with us loyally, and the cases of wilful deception which we have detected have been few in number. But much care and thoroughness has to be exercised by the inspector, or he may easily be "let down."

School children who are contacts are excluded from school for the full quarantine period (three weeks). It is noteworthy that comparatively little spread of infection has occurred through school attendance in Leicester, either during the present or past epidemics.

### **Other Measures.**

Amongst other measures taken may be mentioned visits that are paid to factories, institutions, schools, &c., in connection with the outbreak. Whenever a case of smallpox is found to have attended work after the appearance of the eruption—i.e., when in a presumably infectious condition—the M.O.H. makes a practice of personally visiting the factory or workplace, and with the consent of the manager the employees working in the room affected are collected, the machinery is stopped, and a short address is given, explaining the situation, describing the early symptoms and giving the dates between which secondary cases may be expected to occur. They are warned that should any of them be taken ill they must on no account return to work but must call in their doctor (or send word to the Health Offices) and tell him that they have been exposed to the infection of smallpox. As a double check, the manager is asked to furnish the M.O.H. with the names and addresses of any absentees during the "observation period" which usually lasts for about 10 days.

In the case of schools the Head Teacher and the teacher of the affected class are interviewed and appropriate instructions given.

### **Source of Infection.**

The following figures show the cases occurring during 1929 classified according to source of infection :—

	Cases.	Per cent.
Household contacts (i.e., residents in invaded households) .. ..	130	40.6
Friends and acquaintances (including persons who have visited invaded households) .. ..	61	19.0
Apparently infected at school ..	27	8.4
Apparently infected at work ..	24	7.5
Untraced .. ..	78	24.3

#### Age Distribution.

Age Group.	Cases.	Per cent.
0—4 years (under school age) ..	19	5.9
5—13 „ (school age) .. ..	90	28.1
14—20 „ (young adults) .. ..	75	23.5
21—44 „ } adults .. ..	106	42.5
45 and over } .. ..	30	
Total .. ..	320	100.0

As regards sex, 149 cases were in males and 171 in females.

#### Vaccination.

Of the 320 cases occurring during the year only 25 had been vaccinated. All of these cases had been vaccinated many years before, the shortest interval between the vaccination and contracting smallpox being 15 years. Most of the cases had been vaccinated over 40 years before. In Leicester, apart from the men vaccinated in the army during the war (a considerable but unknown number), there are not many people vaccinated less than 40 years ago except in the residential districts. 294 of the cases were unvaccinated, i.e., they had never been vaccinated prior to exposure to infection. Two of the vaccinated and 20 of the unvaccinated cases had been vaccinated after exposure to infection, i.e., whilst incubating the disease, but too late to prevent the disease developing.

Only one patient had been re-vaccinated. This was a man (E.P.), vaccinated in infancy and re-vaccinated in the war 15 years ago. His wife and all his children (unvaccinated) had smallpox, and he was naturally subject to “pimples.” He was thought at first to have got a slight attack and was admitted with the rest of the family and counted as a case, but it is very doubtful if he really had smallpox.



I do not propose in this report to discuss the effect of vaccination in protecting against smallpox beyond saying that nothing in the present epidemic has altered in any material way the conclusions arrived at from the experience of previous outbreaks, viz., that vaccination confers protection **on the individual** which is complete for a number of years, but, gradually diminishes with the lapse of time.

The precise effect of vaccination upon the community is a separate and much more complex question, and the answer is much more difficult. I have repeatedly stated, and I may say it once again, that, in my opinion, general vaccination of the population is not to-day necessary, and therefore that compulsory vaccination can no longer be justified.

### **Smallpox Hospital.**

For many years Leicester has remained so free from smallpox that the need for a permanent smallpox hospital has not been very apparent. In the meantime the smallpox hospital in Anstey Lane (64 beds) has been used as a Children's Sanatorium, one of the blocks being utilised as a schoolroom.

It was made a condition by the old Local Government Board, when they sanctioned the hospital being used for tuberculosis, that whenever it was required for smallpox the tuberculosis patients should at once be evacuated. To avoid interrupting the use of the institution for tuberculosis until really necessary it has in recent years been our practice to send the first few cases of smallpox either to the Nottingham Smallpox Hospital (an inconvenient arrangement as the Nottingham hospital is 40 miles away), or to one of the two County Smallpox Hospitals. The latter is, of course, the preferable arrangement, but can only be done if either of the County hospitals happens to be open. An arrangement exists between the City and County for mutual assistance as regards the smallpox hospital accommodation, and for a time last year all our cases were treated at the County hospital at Syston. This arrangement was satisfactory so long as the number of cases was small, but it became evident in November that our own hospital would certainly be required, and it was accordingly opened for smallpox on November 27th, 1929, and has been continually in use for smallpox since then up to the time of writing (June, 1930).

It would seem that the time has come when the scheme for a separate Children's Sanatorium should again be considered. The arrangement of "making shift" with the smallpox hospital is far from satisfactory, entailing as it does the interruption of the work whenever the hospital is required for smallpox.

Moreover, the Anstey Lane institution is very old. It was originally built 58 years ago, and was never intended, when it was designed, for use as a sanatorium.

Preliminary plans for a children's sanatorium were prepared a couple of years ago and the site surveyed. I would strongly urge that when any other schemes involving capital expenditure are being considered the claims of this scheme should be borne in mind.

### **Progress of the Outbreak of Smallpox during 1930.**

During the present year, 1930, the outbreak, as has already been stated, became much more widespread. It became necessary in March to engage a temporary medical officer (Dr. B. L. Slater) to assist the Medical Officer of Health. At the time of writing (June, 1930), the epidemic shows signs of abating.

### **SCARLET FEVER.**

Cases, 517.	Deaths, 2.	Case Mortality, 0.4 per cent.
Previous year cases,		
1,971.	„ 4.	„ „ 0.2 „
Removed to Hospital, 302.	Proportion removed, 58.4 per cent.	

Scarlet fever caused comparatively little trouble during the year, the number of fresh cases showing a great reduction on the previous year.

The special serum treatment referred to in the last report continues to be used at the Isolation Hospital giving very satisfactory results, apparently reducing substantially the incidence of complications and the length of time that patients need to remain in hospital.

Neither of the two fatal cases were treated in hospital.

The subject is dealt with fully in Dr. Banks' report in Appendix 2.

### **DIPHTHERIA.**

Cases, 253.	Deaths, 13.	Case Mortality, 5.1 per cent.
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#### **Average for previous six years.**

Cases, 308.	Deaths, 23.	Case Mortality, 7.4 per cent.
Cases removed to hospital during year, 243.	Proportion 96 per cent.	

The number of fresh cases of diphtheria was below the average, both as regards cases and deaths. Localised outbreaks occurred in the last quarter in connection with two schools, viz., Gopsall Street and the Collegiate. The former resulted in 10 cases and the latter in seven cases. Both schools (or rather certain departments) were closed for a limited period, and the latter school was closed a second time as the first period of closure did not appear sufficient.

Dr. Stanley Banks continues to get excellent results at the Isolation Hospital by the intra-venous injection of Antitoxin. (See Appendix II.).

### **TYPHOID (ENTERIC) FEVER.**

Thirty years ago, when the Groby Road Isolation Hospital was built, typhoid fever was one of the most important of the zymotic diseases. The portion intended for typhoid fever (Block No. 4) provided accommodation for 38 patients. Happily, by the time the hospital was opened the decline in typhoid fever had already begun, and except on one or two occasions during a special outbreak it has never been required for this disease, and for very many years now it has been utilised solely for tuberculosis.

Typhoid fever has gradually fallen—not only in Leicester but throughout the country, and in other civilised countries also—until to-day its occurrence is something quite exceptional. It is a good many years since anything of the nature of an outbreak has occurred, such cases as have arisen being sporadic or imported. The average number of cases annually during the seven years, 1922-28, was only five. Last year there were only two cases, the lowest ever recorded. Moreover, one of these cases had been staying at the seaside where she had eaten oysters, and it was reasonable to believe that the disease had been contracted there and not in Leicester.

It would seem probable that before very long typhoid fever will have become virtually an extinct disease in this country, in this respect following the example of typhus fever, malaria and plague.

### **DIARRHŒA AND ENTERITIS.**

Epidemic or “zymotic” diarrhœa, another bowel disease, has also largely disappeared, and although a certain number of deaths are attributed to diarrhœa (or to “enteritis,” which means much the same thing), it is doubtful if many of these need be regarded as being truly “zymotic” in origin. During the year there were only 27 deaths certified as due to diarrhœa or enteritis as compared

with an average of 46 in the previous five years. 25 years ago the number was over 300, and 30 years ago it was over 400.

### **MEASLES AND WHOOPING COUGH.**

Seventeen deaths were caused by measles, and 56 by whooping cough, the latter figure being above the average. Whooping cough and measles are still very serious afflictions in the case of young children. The chief mortality occurs below the age of three years.

### **ENCEPHALITIS LETHARGICA.**

It is only about ten years since encephalitis lethargica, often referred to popularly as "sleepy sickness" (which must not be confused with sleeping sickness), was recognised as a distinct disease. Whether this recognition indicated the appearance of a new disease, or whether it was an old disease which had not previously been identified, is uncertain. Since it has been recognised the number of cases reported each year in Leicester has averaged about 14, and the number of deaths about six. Last year there were 12 deaths certified as due to this cause, but only four cases were notified. Several of the fatal cases occurred in the Royal Infirmary. The disease does not appear to spread from the sick to the healthy, and its mode of origin is very obscure.

### **CEREBRO-SPINAL FEVER.**

Cases notified, 8. Deaths registered, 4.

Of the cases notified, six were removed to the Isolation Hospital. All the cases except one were in children under 14. One of the cases, notified from the Royal Infirmary, was a Desford School boy, as also was a second case not included in the above as it was notified to the County Authorities. These two Desford School cases were treated at the Isolation Hospital and both recovered.

Two other cases were children from the same house. This is very unusual. One other case was on a visit to Leicester from another town.

Cerebro-spinal fever is a very grave disease, but fortunately the number of cases occurring—or at least recognised—has hitherto been very small, averaging only three or four a year.

### **POLIOMYELITIS (INFANTILE PARALYSIS).**

It will be recollected that a serious epidemic of poliomyelitis occurred in 1926, when 81 cases were reported. In each of the two succeeding years only eight cases were reported and in 1929 the figure was only four. There were no deaths.



It is generally considered that after about two years from the onset of an attack little further improvement is to be looked for and any disability remaining must then be regarded as permanent.

### **PNEUMONIA.**

Pneumonia remains one of the principal causes of death. Last year no less than 284 deaths were attributed to it. This is the highest figure in the past ten years. This is accounted for by the epidemic of influenza. Pneumonia is specially fatal at the extremes of life. 105 of the deaths were in persons over 45 years of age, and 106 in children under five, leaving only 73 deaths for the age period, 5—44 years.

### **INFLUENZA.**

A serious and fatal epidemic of influenza occurred in February and March, and the death-rate for several weeks was higher than at any time since the disastrous epidemic of 1918-19. Thus, for the week ending February 23rd, the death-rate was 40.7 per 1,000 and the following week it was 45.2. It then fell to 39.2, 25.0, and 14.0. The total number of deaths attributed to influenza was 214, which is much higher than in any year since the great epidemic of 1918-19 referred to above.

That epidemic, of course, stands quite alone in modern experience, and bad as the influenza was last year it was not comparable to what happened then. It may be interesting to recall a few facts. The epidemic occurred in three waves. The first wave was at its maximum in June and July, 1918, and caused about 100 deaths (70 certified as due to influenza and 30 to pneumonia and bronchitis). The second wave, which was by far the most serious, occurred in October and November, just when the Great War was coming to an end. It caused in round numbers 1,000 deaths in Leicester (800 from influenza and 200 from pneumonia, &c.). The third wave occurred in February and March, 1919, and caused approximately 500 deaths (influenza 300 ; pneumonia, &c., 200). Thus the Great Influenza Epidemic of 1918-19 caused altogether something like 1,600 deaths in Leicester alone. Much the same thing was happening throughout the country generally, and indeed throughout the whole world.

Apart from this comparison, last year's figures were unpleasantly high, and seriously affected the death-rate for the year.

### **TUBERCULOSIS.**

The number of fresh cases notified and deaths registered during 1929 was as follows :—

	Cases.	Deaths.
Pulmonary tuberculosis (phthisis)	657	266
Other forms . . . . .	77	53
	<hr/> 734	<hr/> 319

The corresponding totals for the previous year were 785 and 307.

The subject of tuberculosis is fully dealt with by the Tuberculosis Officer (Dr. W. S. Thomson) in Appendix I., and by the Medical Superintendent of the Groby Road Sanatorium (Dr. Banks) in Appendix II., of this report.

### **Opening of "Home Place," Holt.**

There is, however, one event of special interest in connection with tuberculosis which occurred during the year under review which calls for more than passing comment. I refer to the opening in June, 1929, of our Convalescent Sanatorium, or Convalescent Home for Consumptives, at Holt, in Norfolk.

This event signalled the consummation of four years of effort on the part of the Health Week Committee—a voluntary body under the Chairmanship of Alderman W. E. Wilford—to secure an institution by or near the sea to which patients at the Groby Road Sanatorium might go for a few weeks to complete their treatment before returning home.

The Ministry of Health, after a little persuasion, agreed that if the capital charges were met by voluntary subscriptions the cost of maintenance might be defrayed out of the rates as part of the general cost of treating tuberculosis.

Much difficulty and many disappointments were experienced before a suitable place could be found. At least three schemes were formulated but frustrated by the opposition from residents in the locality chosen, but eventually the Committee secured "Home Place," Holt, which in many ways is undoubtedly the best proposition of any put forward.

"Home Place" is a particularly fine well-built mansion standing in its own extensive grounds, on a sandy subsoil about two miles from the sea. It was erected some 25 years ago as a private residence, almost regardless of expense. For most of the time it has been used as a private school for boys. Owing to the rather unusual method of construction it lent itself quite well for the purpose of a convalescent sanatorium with very little alteration or adaptation.

It has now been in use for 12 months and has proved itself a great asset and a most useful adjunct to our institutional facilities for treating tuberculosis.

It has been sanctioned by the Ministry to accommodate 22 beds, but it could really take a larger number without overcrowding. The Ministry of Health have been asked to sanction the number being increased to 26.

It is used alternatively for (a) men, and (b) women and children.

The patients pay their own rail fare, but incur no other expense.

### **“ Village Settlements ” for Tuberculosis Cases.**

It has long been recognised that the most difficult part of the problem of how best to deal with tuberculosis cases arises after patients have left a sanatorium and returned home. Many cases who have responded well to sanatorium treatment and been discharged with the disease apparently arrested, relapse, sooner or later, after they have returned to their homes and old mode of life and ordinary occupations.

Various solutions have been tried and found wanting, amongst which may be mentioned :—

(a) Increase of duration of stay in sanatorium. This may be advantageous but is not in itself a solution. It only postpones the difficulty.

(b) Change of occupation from indoor to outdoor. The advice which used to be given to patients to “ try and get a light outdoor job with work in the open-air ” is now recognised as being usually impracticable. Most outdoor occupations are not light and they are generally poorly paid. Few ex-sanatorium patients can obtain a living wage as agricultural or horticultural labourers even if they are strong enough for what is usually very arduous work.

A solution for the difficulty which is rather occupying attention at the present moment is what is known as the “ Village Settlement.” This idea has been inspired by the admirable results which have been achieved at Papworth in Cambridgeshire under Dr. Varrier Jones, and at certain other somewhat similar colonies (e.g., Preston Hall and Hairmyres). The Ministry of Health have recently prepared a memorandum on the subject of Village Settlements, and the subject is also discussed at some length in the Report of the Employment Committee of the Joint Tuberculosis Council.

The basic principle of a "Tuberculosis Colony" or "Village Settlement" is that selected ex-sanatorium patients should be permanently housed (either in a hostel or separate houses) and provided with suitable and productive work for which they are paid wages, whilst at the same time they are kept under medical supervision.

Obviously, such a proposition cannot be expected to be self-supporting. On the other hand it will almost certainly entail heavy expense. But to deal with tuberculosis in any manner necessarily entails heavy expense, so that the cost, unless clearly excessive, is not enough to condemn the proposition.

In the Report of the Joint Tuberculosis Council, already referred to, the Committee states :—

"The advantages of the Village Settlement scheme in the treatment of tuberculosis are now well known, but may be briefly recapitulated. The Village Settlement is the most comprehensive scheme for dealing with the ex-sanatorium patient in so far as it aims at providing security of tenure for all time to those admitted to the Settlement. The settlers are employed at a fair wage, receive constant medical attention for themselves, their wives and families, and live in ideal hygienic conditions. All their risks are lessened. They are, in fact, "patients" in a very special and privileged position. They may be discharged from the Settlement for gross but not for relative inefficiency. The community embraces the medical, economic and social aspects of their lives. Practically without exception settlers have shown themselves willing and anxious to live in the midst of an organisation which rules them by what has been described as a method of 'benevolent autocracy.'

"The medical results are excellent as judged from the evidence in the reports of those responsible for the administration of settlements, and even the case which shows advanced physical signs is able to weather the storm of life for a much longer period under settlement conditions than he would do in the outside world."

Generally speaking, a "colony" can be most economically started and carried on if worked in conjunction with an existing sanatorium, and it is probable that the Ministry of Health would welcome a few well-thought out experimental schemes to be carried through by progressive health authorities already possessing large and up-to-date sanatoria.

Of course, there would be serious difficulties to be overcome, but nevertheless, the matter is worth consideration.

In Leicester, owing to the fact that we have a well-organised and up-to-date sanatorium, where much work is already being done

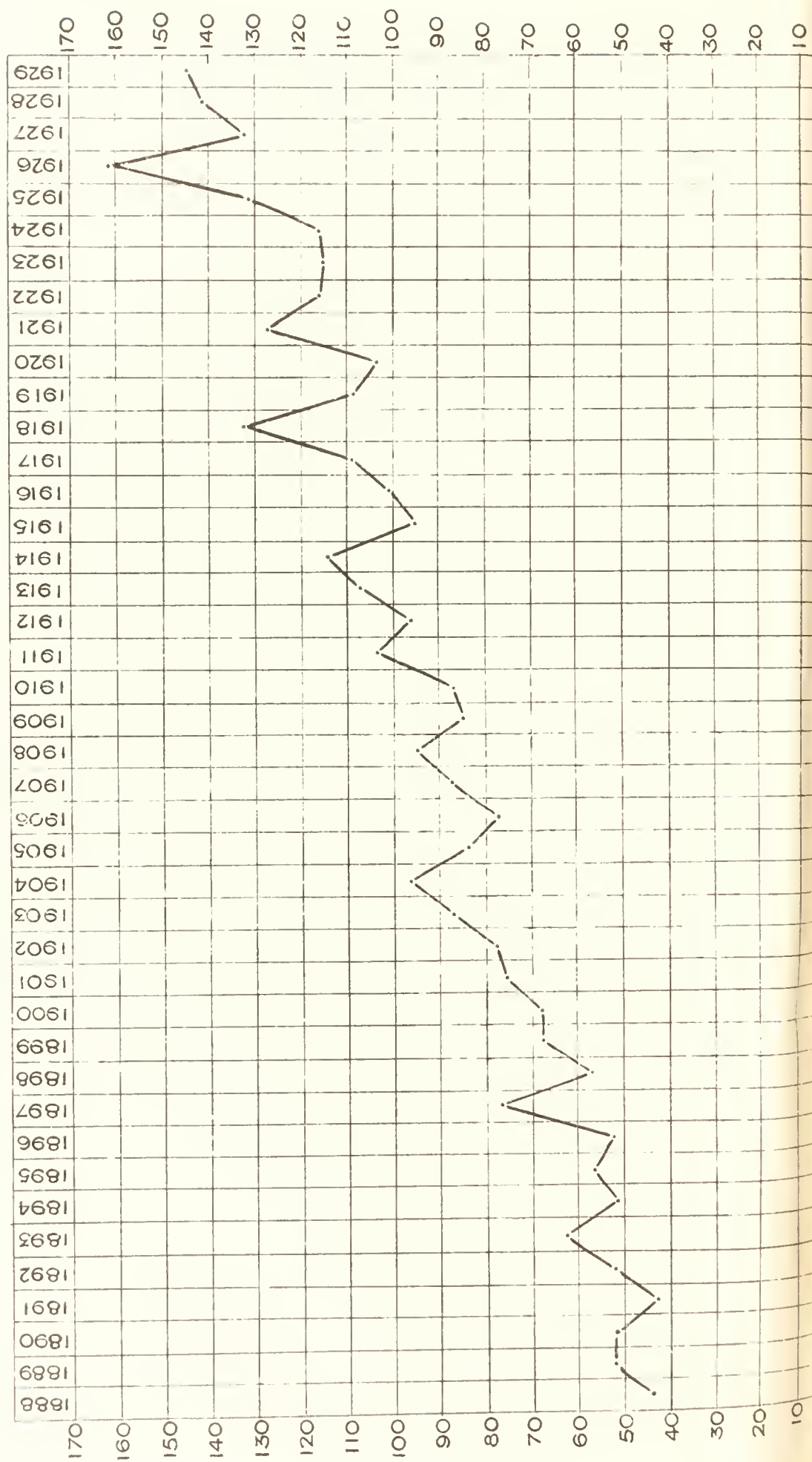




GRAPH II

# CANCER DEATH RATES IN LEICESTER 1888 - 1929.

PER 100 000 POPULATION.



as regards the teaching of handicrafts, we are perhaps more favourably situated for carrying out an experiment of the kind indicated than are most places.

### **CANCER.**

The deaths from cancer (including in that term all forms of malignant disease) numbered 357, of which 163 were in males and 194 in females. This is eight more than in the previous year. The cancer-rate was 1.45 per 1,000, and with the exception of the year 1926 it is the highest figure hitherto recorded. The accompanying graph (No. 2) shows the position at a glance. For statistics of previous years, see Table 14. The question of cancer has been very fully discussed in previous reports.

#### **Radium and Cancer.**

Excellent results continue to be published showing the great value of radium in the treatment of cancer in the more superficial situations, e.g., skin, tongue, lips, mouth, and also uterus, and methods are being perfected ("surgery of access") to enable radium to be applied to some of the deeper-seated forms.

We are warned, however, that whilst success will doubtless increase with longer experience, the results hitherto obtained from the use of radium in the case of internal cancers—which include some of the commonest forms—have hitherto been disappointing. It must be clearly understood, therefore, that at present it is only in a comparatively small proportion of cancer cases that a cure by radium can be expected. Almost everything depends upon the organ or part attacked. Moreover, as in the case of operation, it is vitally important that treatment should be begun whilst the disease is still in an early stage. Any delay, therefore, in diagnosis is likely to be disastrous.

### **CANCER CONTROL CLINIC.**

The Leicester Cancer Control Clinic is of special interest as being a pioneer movement. There is so little that a municipality can do to combat this terrible and dreaded disease that any anti-cancer measure which can be adopted is worthy of careful study, and of all the encouragement we can give it.

In the present state of our knowledge there is little, unfortunately, which we can tell the public as to how to **prevent** cancer. We do, however, know that certain forms of cancer occurring in certain situations, can be cured, either by radium, X-rays, or an

operation, provided only that they are diagnosed and taken in hand early enough. All depends, therefore, on early diagnosis. Nevertheless, a large proportion of those cancers which we have good reason to believe might have been cured are lost because of the delay occurring before their true nature is recognised.

The Leicester Cancer Control Clinic exists primarily to facilitate early diagnosis. It is for the diagnosis, not treatment of cancer. It has been in operation since July, 1927, i.e., nearly three years. The Honorary Surgical Staff of the Leicester Royal Infirmary have been engaged by the Health Committee to attend the Clinic in rotation. The Clinic is open to any case of suspected cancer free of all charge. It offers definite advantages over the Out-patient Department of a General Hospital. The number of cases being small, there is a minimum of waiting and a maximum of individual attention. The patients get the most expert medical advice in the City. The majority of the cases which come to the Clinic are found not to be cancer, and the patients are sent away with their minds reassured.

Cases where further and fuller investigation is desirable are usually admitted to the Royal Infirmary, as also are most cases where cancer is diagnosed. A large proportion of the cases attending the Clinic are sent by medical practitioners desiring a second opinion.

Unfortunately, the number of patients taking advantage of the facilities offered is much smaller than was hoped and expected. Possibly the name of the Clinic frightens some people away. Undoubtedly many persons are afraid of being told that they have got cancer, and they would rather remain in ignorance, not realising that to some extent cancer can now be regarded as a curable disease if only it is taken in hand early enough.

It is to combat this fatalistic and disastrous attitude that further education of the public by means of propaganda is so desirable.

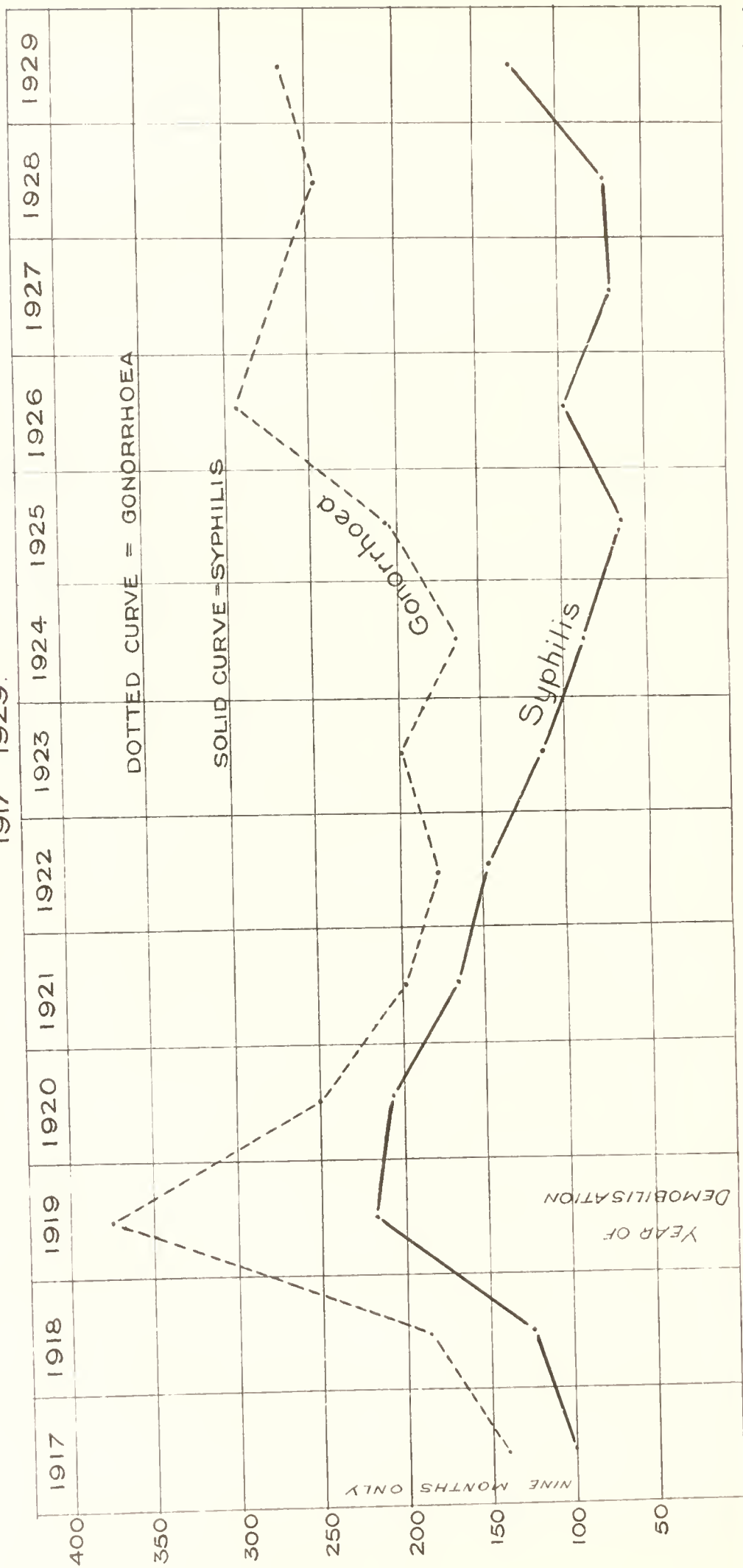
The mere existence of the Clinic must help, I believe, from this point of view. By degrees the public will come to realise the vital importance of early diagnosis and the folly of delay. Much the same difficulty was experienced with tuberculosis 25 years ago.

The Clinic is held at the Health Offices on Tuesday evenings at 6.30 p.m. Latterly it has only been held on alternate weeks the numbers not being sufficient to justify a weekly session, but the nurse is present every Tuesday to interview any patients who may attend.



VENEREAL DISEASES  
NEW CASES IN MALES (CITY ONLY)

Royal Infirmary Clinic  
1917 - 1929.



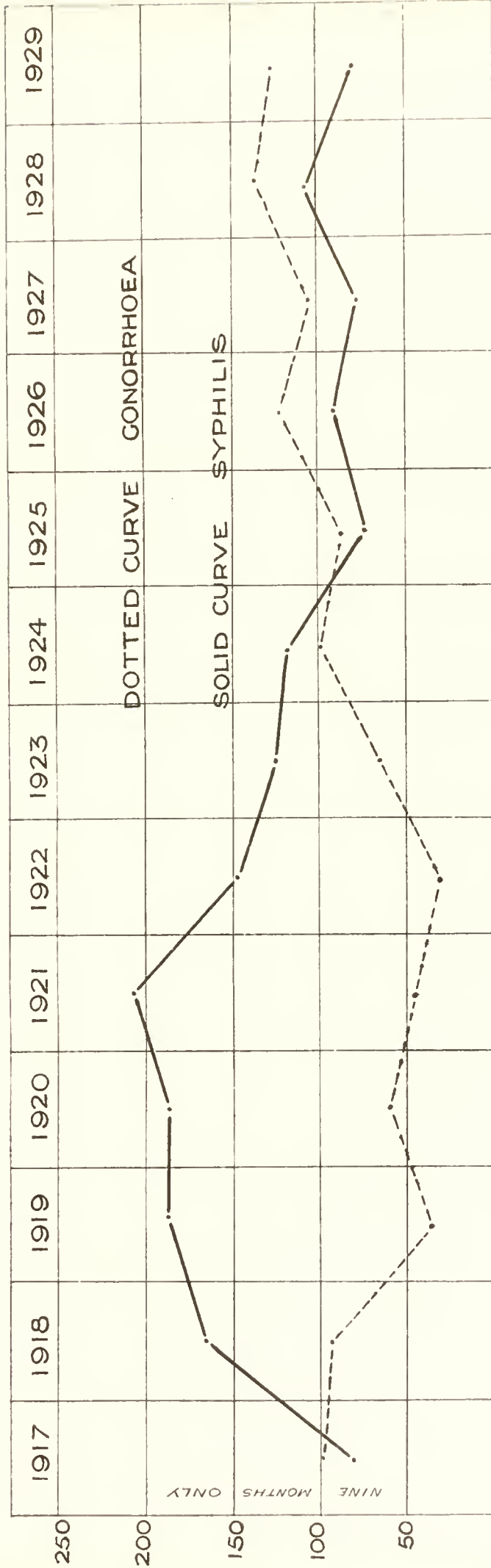
The increase in Venereal Disease in Males in 1919, which accompanied Demobilisation after the War, was very marked. This was followed by a steady decline for several years. Since 1924 gonorrhoea has increased but the number of new cases is only the number coming forward for treatment and not the number actually occurring of which we have no official record.



# VENEREAL DISEASES NEW CASES IN FEMALES (CITY ONLY)

Royal Infirmary Clinic

1917 - 1929



The curves for Venereal Diseases in Females are very different from those in Males. The number shown as new cases is only the number coming forward for treatment and not the number actually occurring of which we have no official record. The apparent increase since 1925 can partly be accounted for by a difference in classification



## VENEREAL DISEASE.

From certain points of view venereal diseases are the most tragic and the most disastrous of all maladies. Judged by the few deaths directly ascribed to them they may not appear very fatal, but they take a heavy toll of human life indirectly by undermining the constitution and by preparing the way for other diseases.

Moreover, it is quite impossible to assess the amount of ill-health, of mental suffering and of domestic unhappiness caused by these affections. Few misfortunes better merit the use of the metaphor : "the skeleton in the cupboard" than to be the secret victim of these diseases.

It is a matter for serious concern, therefore, that during the year under review the number of fresh cases of syphilis in males presenting themselves for treatment at the V.D. Clinic at the Royal Infirmary showed a substantial increase.

The increase became apparent in the latter part of the year, and my attention was drawn to it by Major F. Blakesley, the Medical Officer in Charge of the Male Clinic.

He informed me that there was a serious increase in the number of cases of **primary** syphilis (as distinct from cases in the secondary stage) coming to the Clinic for the first time.

The following table gives the figures for 1929 and five previous years :—

### Venereal Diseases Clinics.

New Cases presenting themselves for Treatment.

(City Cases only).

			MALE.		FEMALE.	
			Syphilis.	Gonorrhœa.	Syphilis.	Gonorrhœa.
1924	..	..	93	166	119	98
1925	..	..	66	202	72	84
1926	..	..	99	291	90	118
1927	..	..	70	275	75	102
1928	..	..	71	246	104	136
1929	..	..	125	266	80	126

It will be noted that an increase in syphilis in females occurred in 1928 and in males in 1929. Whether this was a coincidence or cause and effect it is not possible to say.

The position is seen more clearly by reference to the accompanying graphs.

The V.D. Sub-Committee of the Health Committee held a special meeting, at which both V.D. Medical Officers were present to consider the matter, and later the Lord Mayor, as Chairman of the Health Committee, convened a small conference of certain persons, chiefly doctors, specially interested with the same object.

The cause of the increase cannot be definitely stated though Major Blakesley is disposed to attribute it to the presence in the City of certain loose women in a highly infectious condition. There is not, however, much definite evidence to support this hypothesis.

### PREVENTION OF VENEREAL DISEASE.

There are really only two ways of attacking the problem of venereal disease : (1) Diagnosis and Treatment ; (2) Propaganda.

(1) Treatment of persons suffering from the disease also helps to prevent the disease by rendering persons less infectious. Special and adequate facilities for diagnosis and treatment have been provided at the Leicester Royal Infirmary as an essential part of our V.D. scheme. There are four clinic sessions per week for males and three for females. At all but one session two medical officers are in attendance, besides skilled nurses. Moreover, irrigation and dressings are done by the nurses (male and female) every day. There is also excellent in-patient accommodation (for either sex) in the new V.D. Block for those cases which, for special reasons, need in-patient treatment.

In addition there are the facilities provided at St. Mary's Home, for both in- and out-patients in the case of females.

(2) **Propaganda.** Since venereal diseases are usually contracted through illicit relations between the sexes, and frequently by young people scarcely out of their " teens," it is reasonable to believe that much can be done to deter people from exposing themselves to risk by explicit warnings of the very serious danger to health and happiness which these diseases involve. There is much difference of opinion, however, as to the best method of giving such warning and as to the degree of frankness which is desirable in approaching the difficult and delicate question of sex.

One method which is open to comparatively little objection, and which undoubtedly reaches a very large proportion of the population, especially in the case of males, is by the putting up of special V.D. notices in public conveniences. This is the method which is chiefly relied upon in Leicester. These notices also urge the importance of prompt and efficient treatment and give the address

and times for attendance of the V.D. Clinics. I have little doubt that they serve a most useful purpose. Recently a special warning, based on the increase in V.D. referred to above, has been added to these notices.

### **ALCOHOLISM—THE ABUSE OF ALCOHOL.**

The abuse of alcohol—i.e., the taking of alcohol in excess—like venereal disease, causes comparatively few deaths directly, but indirectly it has a serious effect in shortening life by undermining the constitution and preparing the way for other diseases. Alcohol and venereal disease indeed are often associated, the former often conducing to the latter. Many a man, and doubtless many a woman, has contracted venereal disease when more or less under the influence of alcohol, for one principal effect of indulgence in alcohol is to weaken that self-control which is our chief safeguard against sexual temptation.

But other diseases, e.g., pneumonia, have the soil prepared for them in a special way by alcohol; whilst such diseases as chronic nephritis and cirrhosis of the liver are caused or aggravated by the consumption of alcohol.

This is not the place to preach a temperance sermon, but every medical officer of health in reviewing the causes of death and ill-health, especially preventible causes, ought to refer, in unequivocal language, to the damage to health wrought by alcohol.

It is certainly reasonable to believe that the reduction in drunkenness and the greater sobriety of the nation have contributed materially to the improved health of the nation. There is still, however, great room for improvement before it can be said that alcohol is no longer an important factor detrimentally affecting the national health.

### **RHEUMATIC AFFECTIONS.**

Reference was made in the last report to "rheumatism" and rheumatic affections as being probably the most important disease, or group of diseases, which local authorities would next be called upon to deal with.

It was pointed out that although the number of deaths directly attributed to rheumatic affections was negligible, the mortality indirectly caused by them, through their damaging effect upon the heart, was very great. Also that the amount of sickness caused by rheumatism and arthritis and by heart disease was overwhelming.

Recognising the great importance of this group of diseases, a movement is beginning which has as its object the provision of "arthritis clinics" specially equipped for dealing with one of the most distressing manifestations of rheumatism. Some of these clinics have already been started.

It is too soon yet to pronounce any final opinion as to the value of the work such clinics are able to accomplish. They must necessarily be regarded at present as experimental and the results watched and studied.

### **SCABIES (ITCH).**

Provision is made at the Health Office for the treatment of this unpleasant and contagious affection, and brief reference may be made to it here. During the year 38 cases were dealt with, all but three being in children, of school age or under. The number is rather less than in the previous year, but above the average for several previous years. The treatment consists of hot baths followed by the application of Marcussen's (Danish) ointment. It is usually effective, and only very occasionally do patients return with a recurrence.



## PART III.

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# Maternity and Child Welfare.

By E. B. BERENICE HUMPHREYS, M.B., Ch.B., Edin.,  
*Maternity and Child Welfare Medical Officer.*

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The statutory Maternity and Child Welfare Committee (appointed under the provisions of The Maternity and Child Welfare Act, 1918), consists, in Leicester, of the full Health Committee, together with four co-opted members. Actually the work is carried out by a Sub-committee of ten members of the Health Committee (together with the four co-opted members), which meets each month. When the minutes of this Sub-committee are submitted to the Health Committee for confirmation, the co-opted members are invited to be present.

It will be convenient to refer to the work of the Department under the following headings :—

Health Visitors.

Schools for Mothers and Infant Welfare Centres.

Infants' Milk Depot and Highcross Street Centre.

Ante-natal Clinics.

Dental Clinic.

Municipal Maternity Home.

Day Nursery.

Midwives.

Registered Nursing Homes (including Maternity Homes).

Assistance in Necessitous Maternity Cases.

Staff.

## Health Visitors.

There are thirteen District Health Visitors (one part time), with Mrs. Reed as Superintendent Health Visitor, and their names and qualifications are set out on page iii.

The duties of the Health Visitors comprise their work on the district and at the Infant Welfare Centres. Each Health Visitor has a district and is responsible for the home visiting in all cases of children under five years of age. Infants whose births are notified are visited as soon as possible after the tenth day in the cases notified by midwives, and after the fourteenth day in cases where a doctor is in charge of the case. Thereafter the Health Visitor revisits approximately once a month, according to the circumstances and conditions which she finds on her first visit. Every effort is being made to obtain a continuous record, up to the age of five years, of all children, once their existence has been notified to the Department. This often necessitates many visits and much time in tracing children who do not remain long at one address.

The following is a statistical report on the work done by the Health Visitors during 1929 :—

Number of first visits to infants .. ..	3,438
„ revisits to children under one year old .. ..	16,118
„ visits to cases of Ophthalmia Neonatorum .. ..	165
„ visits to children one to five years old .. ..	2,822
„ visits to ante-natal cases ..	920
„ other visits .. ..	4,872
Attendances of Health Visitors at Schools for Mothers and Infant Welfare Centres ..	850
Attendances of Health Visitors at Ante-natal Clinics .. ..	62

The work of the Health Visitors at the Schools for Mothers and Infant Welfare Centres is dealt with under that heading.

## Schools for Mothers and Infant Welfare Centres.

There are fifteen Centres in Leicester (and also the Infants' Milk Depot) at which mothers may attend and bring their children under five years of age, and a complete list of the Centres is set out below :—

Name.		President.	Day of Meeting.
Western Road	..	.. Mrs. Beale	Monday
Curzon Street	..	.. Mrs. Turner	..
Clipstone Street	..	.. Mrs. Banks	..
Aylestone Road	..	.. Miss Windley	Tuesday
Bedford Street	..	.. Mrs. Millard	..
Wellington Street	..	.. Mrs. Catlow	..
Wesley Hall	..	.. Mrs. Taylor	..
Cavendish Road	..	.. Mrs. Johnson	..
Justice Street	..	.. { Miss Went Mrs. Bouskell }	Wednesday
Uppingham Road	..	.. Mrs. Swainston	..
Fosse Road	..	.. Mrs. Gibbs	..
Coleman Road	..	.. Mrs. Herbert	..
Belgrave Hall	..	.. Mrs. Mantle	Thursday
Clarendon Park	..	.. Miss Partridge	..
*Highcross Street Centre	..	.. Mrs. Viccars	..

The total number of sessions held during the year was 688, and the total attendances of Mothers was 36,676.

A session is held each week. There is a doctor in attendance at each Centre to give advice, free of charge, to the mother about herself or her child. All cases see the doctor on their first visit, and thereafter as occasion demands. Efforts are made to ensure that all children—the babies, the ex-babies and the toddlers—are brought to the notice of the doctor at regular intervals for general supervision so that defects may be prevented, or discovered at an early age, and appropriate treatment recommended. Mothers are willing and usually anxious for the doctor to see their child while it is under one year old, but after that age it is difficult to convince many of them of the value of regular medical supervision of the child, which to them appears to be thriving. The advent of another baby may be responsible, in some cases, for this overlooking of the toddler. As far as accommodation permits, each Centre has a room set apart as a Nursery where mothers may leave their toddlers in the care of one or more Voluntary Workers, who keep these children happy and occupied. This arrangement serves the two-fold purpose of training the toddlers to leave their mothers and also affords relief for the mother, during which she may give her whole attention to the activities of the Centre and so derive the maximum benefit therefrom.

The following medical practitioners conduct the medical consultations at the various Infant Welfare Centres each week :—

\*This School differs from the others in that the premises are permanently rented by the Corporation and are available every day of the week.

Dr. F. Armitage, Dr. Gertrude Austin, Dr. Moffatt Holmes, Dr. Catherine Mitchell and Dr. P. E. Snoad. Dr. E. Gordon Lawrie, the Assistant Tuberculosis Officer, attends at four Centres, and the Maternity and Child Welfare Medical Officer at three Centres, including the Infants' Milk Depot, each week for the same purpose.

A Health Visitor is attached to each Infant Welfare Centre and, as far as possible, her district work is in the neighbourhood of the Centre which she attends. This arrangement is important to ensure the continuity of the work done in the district and at the Infant Welfare Centre. It is largely through the home visiting of the Health Visitor that the work of the Infant Welfare Centre is made known to new mothers, and the Health Visitor's knowledge of the home conditions of her cases should be available for the doctor at the Centre. Similarly, the Health Visitor should be in close touch with the doctor to ensure that the medical advice given at the Centre is carried out.

In addition to the medical consultations, much useful work in the teaching of the various branches of Mothercraft is carried out at the Centres. In the matter of suitable clothing of children under five years of age, much good work is being done. The display at each Centre of a set of model garments, suitable in design and material for the baby and the toddler, with similar garments which may be purchased or, better still, patterns from which the mother herself can make the garments, constitutes an important branch of Mothercraft which is being emphasised at the Centres.

At each Centre a "talk" is given at fortnightly intervals on a subject which should be definitely helpful to the mothers. The syllabus includes Ante-natal supervision, the nursing mother, breast feeding and artificial feeding of infants, general management of the baby and toddler, &c. The majority of these "talks" are given by Mrs. Reed—the Superintendent Health Visitor—and by Nurse Prior, who is attached to the Department as a part-time official in this capacity. At Highcross Street Centre and occasionally at some of the other Centres, the Health Visitor attached to the Centre gives the fortnightly "talk."

There are two Infant Welfare Centres which differ from the others in that the premises are permanently rented by the Corporation and are open daily. These are the Infants' Milk Depot, Belgrave Gate, and the Highcross Street Infant Welfare Centre.

**1.—The Infants' Milk Depot, Belgrave Gate,** has been open continuously since 1906, a time when comparatively little attention was paid to infant welfare. Mrs. Stanion has been

manageress since the premises were opened, and there are now two Assistants for the routine work in connection with the sale of dried milk. The dried milk sold is chiefly manufactured by the " Hat-maker " process, though some " spray process " milk is also supplied. It is the Central Depot for the distribution and sale of dried milk and, in addition, a doctor attends on two mornings in each week to conduct an infant clinic.

The premises are open throughout the day and mothers may attend at any time to have their babies weighed and to receive advice from Mrs. Stanion.

The number of fresh cases of infants brought to the Depot during 1929 was 685 as compared with 700 in the previous year. The total number of consultation clinics held during the year was 76, and the total attendances 898 (as compared with 1,358, 1,351, 1,158, 1,151 and 1,246 in the five previous years), the average attendance being 11.8 as compared with 12.7 during the previous year. The decrease in the number of clinics, and correspondingly in the number of attendances during the year, was due to the illness and subsequent resignation of the Maternity and Child Welfare Medical Officer (Dr. Helen Dent), who conducted these consultations. Whenever it was at all possible the Medical Officer of Health was good enough to do this work himself during the absence of Dr. Dent. In addition, there was an attendance of 5,845 infants brought to be weighed, apart from the clinics.

**2.—Highcross Street Infant Welfare Centre.** These premises comprise a three-storey house of eight rooms, five of which are actually in use daily. A Health Visitor is always in attendance and mothers may attend at any time to obtain dried milk, to receive advice about their children or themselves in relation to their children, or to have their babies and toddlers weighed. A medical consultation is held on Thursday afternoons and a fortnightly " talk " to mothers is given on Tuesday afternoons by the Health Visitor. For a period a fortnightly dressmaking class has been arranged by the President of this Infant Welfare Centre. In addition to these activities, a conveniently designed window in the front room of the ground floor for the display of diagrams and pictures and model babies and toddlers, suitably clothed, affords a silent but useful aid to the Mothercraft taught at this Centre. The details of the work for 1929, expressed numerically, are as follows:—

Attendances of children under one year old	2,039
"          "          one to five years old ..	306
Number of Clinics held .. ..	49
Attendances at Clinics .. ..	1,449



### Ante-natal Clinics.

There are three municipal clinics for the expectant mother, viz. :—The City of Leicester Maternity Home, Westcotes Drive (Friday morning and afternoon) for those women who have booked their confinements at this Home ; the Infants' Milk Depot (Tuesday morning), and Highcross Street Centre (Wednesday morning). The medical work at these clinics is carried out by the Maternity and Child Welfare Medical Officer. The women who attend include :—

1. Those who come independently, or are referred by a Health Visitor and have not made any arrangement with a doctor or a midwife, or at a Maternity Home for their confinement. They continue to attend the clinic until such arrangements are made, when details of their cases are sent on to the person booked to attend the confinement, and with whom arrangements are made as to subsequent attendances at the clinic.

2. Those who are referred to the clinic by midwives. Since 1927 the Central Midwives' Board requires midwives to carry out ante-natal supervision of their patients and to keep certain records. Some midwives are not competent to do this and they are therefore being urged to refer their own new cases to the Ante-natal Clinic and to attend there themselves for instruction in the routine of this section of their work. A competent midwife is able to carry out the supervision according to the standard of the Central Midwives' Board and so form an opinion of her patient in relation to child-bearing, but she is not in a position to judge of the woman's general health. This is an essential consideration in connection with child-bearing, and at least one medical examination is therefore necessary in all cases. The ante-natal clinic affords this facility for those cases for whom no doctor is booked.

With the patient's consent a written medical report is sent to the midwife after the first consultation and later when any abnormality is discovered.

3. Those who are sent by medical practitioners. Occasionally a doctor sends his own cases to the Ante-natal Clinic for examination, and the same procedure is carried out in the matter of medical reports.

From time to time expectant mothers who have definitely engaged their own doctor present themselves at the ante-natal clinic. The irregularity of this procedure is pointed out to them and they are informed that they cannot be examined unless the doctor who has been engaged expressly wishes this.



In addition to the routine medical examination at the ante-natal clinics, their educational value is an important consideration. The clinics serve as training centres for pupil midwives, and for those midwives, already practising, who are not competent to carry out the ante-natal supervision now required of them by the Central Midwives' Board.

Further, the very existence of an ante-natal clinic serves to indicate to women that they need definite and skilled supervision during their pregnancy. The clinics should cause them to seek advice, and to seek it earlier than has been the custom hitherto, whether they go to a clinic, to their own doctor or to a midwife.

The ante-natal clinics provide excellent opportunity for teaching of Mothercraft. The expectant mother may receive guidance as to the most hygienic outfit for her baby ; she may see models and obtain patterns and directions as to the making thereof. The ante-natal period is a time when the mother is anxious to learn and the preparation of baby clothing, on rational lines, affords her suitable and profitable employment at a time when, if left too much to herself, she is likely to become introspective. Again, the ante-natal period is obviously the time when the subject of breast-feeding should be emphasised and the clinic affords excellent opportunity to educate those women who, early in their pregnancy, have some prejudice against suckling their child, and to encourage and supervise those women who are anxious to breast-feed. I am confident that much of the hard teaching at the Infant Welfare Centres would be simplified, and in some cases be rendered unnecessary if women could only be convinced, long before the baby is born, that breast-feeding is practicable in the majority of cases.

The following is a quotation from a memorandum prepared by the Ministry of Health during 1929 on Ante-natal Clinics in connection with Maternal Mortality :—" It is possible that under a reformed Maternity Scheme much of the work of routine examination (at the ante-natal clinics) may be transferred to the family practitioner and the trained efficient midwife, but at the present time they (the ante-natal clinics) are essential for securing ante-natal care where it would not otherwise be available."

Further, the British Medical Association, in a memorandum outlining a National Maternity Scheme for England and Wales, while indicating, as in the Memorandum of the Ministry of Health, that the routine medical examinations may be referred to the family doctor, states that " there will still be scope for the educational work (of the clinics) in mothercraft, which is best done when the mothers can be dealt with collectively by a specially skilled doctor or nurse."

It is therefore evident that the ante-natal clinic should provide the educational facilities indicated for the expectant mother, while at the same time the clinics should afford medical supervision for those mothers for whom such would not otherwise be available.

The number of ante-natal clinic sessions held and the attendances during 1929 were as follows :—

	Number of Sessions.	Number of Attendances.	
		New Cases.	Old Cases.
Milk Depot .. ..	32	99	125
Highcross Street ..	48	165	182
Maternity Home ..	96	417	979

### Maternity and Child Welfare Dental Clinic.

This clinic has been open since November, 1924, and the arrangement then made with the School Dental Service still continues. One of the School Dental Surgeons sets aside one afternoon session in each week for expectant and nursing mothers and children under five years of age for whom dental treatment is recommended by the doctors at the ante-natal clinics and Infant Welfare Centre. The Health Department pays the Education Department for the services rendered according to agreement, the payment covering the salary of the dentist, appliances, material, &c. Dentures are made by outside dental artificers, but are fitted by the dentist at the clinic. Charges are calculated on the basis agreed upon by the Dental Profession for patients insured under the National Health Insurance Act. The patient pays half the charge and the balance, representing the difference between patients' payments and the cost of the clinic, falls on the Maternity and Child Welfare Committee.

The following are the figures for 1929 :—

- 42 Clinic Sessions were held.
- 96 New Cases attended.
- 343 Attendances were made.
- 95 Cases completed treatment.
- 27 Dentures were supplied.
- 10 Dentures were repaired.
- 211 Extractions of Permanent Teeth.
- 60 Extractions of Temporary Teeth.
- 89 Local Anæsthetics were given.
- 12 Cases received " gas " anæsthesia.
- 32 Fillings were done.
- 7 Scalings were done.
- 137 Prosthetic and other Dressings were made.

The figures do not represent the total amount of dental work done as the result of advice given at the Ante-natal Clinics and Infant Welfare Centres as many patients, so advised, seek treatment from their own dentist.

The Dental Clinic is doing important work, and furthermore, the existence of such a clinic, even for those patients who are able to contribute towards their treatment, is a great help in persuading reluctant and apathetic patients to avail themselves of the facilities. Patients who otherwise would postpone treatment indefinitely will keep an appointment which is fixed for them at the Dental Clinic.

### **Municipal Maternity Home.**

The Municipal Maternity Home, situated in Westcotes Drive, was opened in August, 1920, having been converted from a large private mansion which was acquired for the purpose. It stands in its own beautiful grounds, and is away from noisy traffic. It provides accommodation for 26 beds, together with one isolation bed. The number of confinements in the Home each year has been as follows :—

1920 (five months only)	..	139
1921 .. ..	..	339
1922 .. ..	..	345
1923 .. ..	..	394
1924 .. ..	..	444
1925 .. ..	..	438
1926 .. ..	..	455
1927 .. ..	..	445
1928 .. ..	..	515
1929 .. ..	..	504

It will be seen that the number of cases admitted during 1929 falls but little short of the highest total (in 1928) since the Home was opened. On more than one occasion the number of patients in the Home exceeded the number of statutory beds and occasionally it was necessary to decline to book cases. But this fact cannot be taken as an indication that the Municipal Maternity Home is inadequate for the needs of the city, as an analysis of the 504 patients admitted in 1929 shows that 90 of the cases were resident outside the city and that 27 were from the Corporation Housing Estates beyond the city boundary, leaving actually only 387 patients admitted from within the city.

The Ante-natal Clinic for women who have booked to have their confinement in the Municipal Maternity Home is held on the premises for two sessions in each week (Friday morning and afternoon). The accommodation available for this clinic comprises a waiting room and an improvised examination room and is totally inadequate and markedly inconvenient for the patients and staff concerned with the clinic, and for the indoor nursing staff of the Home. The matter is receiving the attention of the Maternity Home Sub-Committee, and it is hoped that alternative accommodation will be available in the near future.

A tabular statement of the work done at the Home is given in Table 17, and a financial statement in Table 18.

**Staff.**—Dr. T. W. Allen continues as the Medical Officer on call for the Maternity Home.

Miss Annie Compton resigned her post as Matron in October, 1929, on health grounds, and Miss E. Bradshaw was appointed as her successor.

**Training of Midwives.**—The Municipal Maternity Home is an approved Training School for pupil midwives, and during the year 9 general trained nurses and 6 untrained persons were accepted for training. Of these 15, nine completed their training during the year, and seven of them were successful in obtaining the certificate of the Central Midwives' Board.

**Midwifery Lectures for Pupil Midwives.**—There are three institutions in Leicester which are recognised by the Central Midwives' Board as training schools for pupil midwives, viz., The Municipal Maternity Home, The Leicester and Leicestershire Maternity Hospital, and The City General Hospital (formerly North Evington Poor Law Infirmary). Following the decision of the Central Midwives' Board, the three separate lecture courses for pupil midwives have been combined since 1928 into one course, which the pupils from the different institutions attend. The arrangement with the University College, which made this practicable, still continues. A special committee was appointed by that body, composed of representatives of the College, together with the Medical Officers of the Institutions. Dr. Astley Clarke, a member of the College Board of Governors, was appointed Chairman, and the Medical Officer of Health was appointed Honorary Secretary. Income is derived from the fees of the pupils attending the courses, and out of the funds so obtained all expenses, including lecturers' fees, have to be paid. The University College made it a condition that under no circumstances would they be responsible for any expense.



Two courses, each of 30 lectures, are held each year, half being given at one institution and half at the other. The curriculum is divided into two halves, each of the two lecturers taking a half. One lecture at the close of each course, dealing with the relationship of the midwife to the local supervising authority, is given by the Medical Officer of Health.

### **Day Nursery.**

The Corporation took over the work of the Leicester Day Nursery Society in July, 1920, and the work of the two old day nurseries was transferred in February, 1923, to the present premises (formerly St. Martin's Vicarage) in St. Martin's Lane.

Mothers who are obliged to go to work and who would have difficulty in finding a suitable daily nurse woman, may leave their children, up to five years of age, under skilled supervision and healthy conditions throughout the day for a nominal charge. The house provides excellent accommodation for the nurseries and for the staff. The rooms are light and airy, and the open-air playground, with its sand pit, is a great asset to the nursery and a joy to the children. Except in very severe weather, it is possible to accommodate all the children out of doors in the playground, the older children happy at their games and the babies, suitably clad, in their cots.

**Attendances.**—The Day Nursery was open during the year for 249 full days and for 49 half-days (Saturdays). The total full-day attendances were 10,188, and half-day attendances 2,167. Converting the half-days into full days, we get a total average full-day attendance of 41. The corresponding figure for the previous year was 40.

**Teaching in Mothercraft.**—The arrangement with the Education Committee for the teaching of Mothercraft at the Day Nursery to schoolgirls continues. During the year 178 girls attended, coming from the following schools:—Elbow Lane, King Richard's Road, St. George's, Holy Trinity, St. Matthew's Chester Street, Narborough Road, and St. Mary's. The girls come in batches (eight being the maximum number), one batch attending in the morning and one in the afternoon, and each batch attends for four weeks. The total attendances of schoolgirls were 3,028, and the daily average 17.

### **Midwives.**

A list of midwives who, during 1929, notified their intention to practice in the City of Leicester is appended (Table 16).

Their inspection during the year was carried out, but not with the usual frequency, owing to the illness and subsequent resignation of the Inspector of Midwives (Dr. Helen Dent).

### **Nursing Homes, including Maternity Homes.**

There are 24 registered Nursing Homes (including Maternity Homes) in the city and their names and registered accommodation are set out in Table 26.

They were inspected during the year by the Maternity and Child Welfare Medical Officer. The accommodation and facilities vary considerably in the different registered homes, but every effort is being made to secure in all the homes a high standard of efficiency.

### **Assistance in Necessitous Cases.**

A special Sub-Committee, of which Miss Cooper is Chairman, meets each week to consider applications for help in necessitous maternity cases. Every application has to be made in writing on a form which has been carefully drawn up for the purpose, and which has been modified from time to time as experience has suggested. In this form, signed by the applicant, a full statement has to be made of all sources of income, together with particulars as to rent, number of dependent children, &c. This statement is frequently checked by application to the employer, &c., and the Health Visitor appends a report on the case.

The following figures show the amount and variety of assistance given during the year :—

- ( 294 New cases were granted milk.
- ( 1,119 Old cases were granted milk
- ( 4,876 Gallons of milk were granted free.
- ( 104 Cases were granted dried milk free.
- ( 533 Packets of dried milk were granted free.
- 30 Cases were admitted to the Day Nursery at reduced rate.
- 5 Cases were admitted free to the Day Nursery.
- 5 Cases were admitted to the Maternity Home at reduced rate.
- 1 Case was admitted free to the Maternity Home.
- In 19 cases doctors' fees were remitted.
- In 16 cases total fees for midwives were allowed.
- In 4 cases half-fees for midwives were allowed.
- 5 Cases were assisted with a Home Help.
- In 98 cases no action was taken.



## Maternal Mortality.

During the year there were 5 deaths registered as due to puerperal sepsis, and 14 deaths due to "other accidents and diseases of pregnancy and parturition," making a total of 19 as compared with 15 in the previous year. As the gross number of births registered was 4,044 (corrected number was 3,747, but for this purpose the gross number is the figure to be taken). This gives a puerperal sepsis rate of 1.2 per 1,000 births (as compared with 2.1 in the previous year), and a gross maternal mortality rate of 4.17 as compared with 3.5 in 1928. The latest figure available for England and Wales is 5.6 for the year, 1928, so that Leicester compares favourably with the rest of the country.

The following are some particulars concerning the individual deaths. Of the 5 puerperal sepsis cases two were in connection with lying-in institutions, one occurred in a confinement at the woman's own home, one was a case of incomplete abortion, and one was in connection with the confinement of an unmarried girl of 18 years.

Of the 14 cases of "other accidents and diseases of pregnancy," one was a case of nephritis, two were cases of eclampsia, one was a case of eclampsia and lobar pneumonia, one was of lobar pneumonia and abortion, one was pneumonia and influenza following abortion, one was pneumonia and influenza following confinement, one was heart disease, one was pulmonary embolism, one was pulmonary oedema, heart disease and syphilis in a woman who was 8 months pregnant, one was post-partum hæmorrhage, one was obstructed labour, operation, heart failure, contracted pelvis, one was toxæmia, and one was a ruptured ectopic gestation.

From this brief survey it will be seen that in the present state of our knowledge many of these deaths must be regarded as largely unpreventable. It would appear that the strain of child-bearing proves too great for many of these women in whom some constitutional disease already exists, or occurs during the lying-in period.

The question of the persistent high rate of maternal mortality is one which has received much attention during recent years. The various aspects of the problem are being dealt with by the several bodies concerned. Efforts are being made to devise practical schemes which will provide a skilled midwifery and medical service for women during the ante-natal, the lying-in, and the post-natal periods. Such facilities would not only prevent much maternal morbidity, but would also greatly reduce the maternal mortality rate by eliminating those cases in which such a deplorable termination is preventable.

### **Staff.**

Dr. Helen Dent, the Maternity and Child Welfare Medical Officer, was unable, owing to ill-health, to continue her duties after 16th May, 1929, and later tendered her resignation. I was appointed as her successor and took up my duties in September, 1929.

Miss Agar and Miss Barnard resigned their posts as Health Visitors in September to enter the Durham Training Centre for Health Visitors. Miss Vicker resigned on the grounds of ill-health in November.

Miss Conlon was appointed as a Health Visitor in April, Miss Johnson and Miss Mallison in October, 1929, and Miss Kavanagh in January, 1930.

E. B. BERENICE HUMPHREYS.

## PART IV.

# Administrative and General.

### HOUSING OF THE WORKING CLASSES.

The housing question, though less acute than was the case a few years ago, is still very far from having been satisfactorily solved.

During the year 1,424 new houses have been erected, viz., 1,028 by private enterprise and 396 by the Housing Committee. Of the 396, 157 were erected on sites outside the city boundary. In addition 89 houses were erected for tenants displaced owing to street improvement schemes.

The figures for the past nine years are shown in the following table—

Number of Houses Erected.*				
		By Private Enterprise.		Total.
		Without Subsidy.	With Subsidy.	
1921	..	21	87	392
1922	..	114	—	260
1923	..	135	—	84
1924	..	336	70	114
1925	..	298	239	513
1926	..	374	303	1036
1927	..	726	265	1590
1928	..	481	523	587
1929	..	348	680	396
Total for 9 years		2833	2167	4972

N.B.—Of the 4,972 houses erected by the Corporation, 2095 were outside the city boundary.

\*Figures supplied by the City Surveyor and City Housing Architect.

It will be seen from the foregoing figures that there has been a large increase during the past two years in the number of subsidy houses built by private enterprise, the figure having gone up from 265 to 680. During the same period the number of new houses erected by the Housing Committee (all with subsidy) has fallen greatly, viz., from 1,590 to 396.

In addition to the houses erected by private enterprise within the city, and by the Corporation within and without the city, there are a considerable number of houses erected by private enterprise just outside the city boundary which should also be taken into the reckoning when considering the number of new houses erected for Leicester people.

### **Overcrowding.**

Yet in spite of all the houses that have been built there is still a shortage, and gross cases of overcrowding are constantly coming to the notice of the Health Department. In Leicester, as in other cities, the great need to-day is amongst the poorest section of the community who cannot afford the rents at present being charged for new Council houses. As a class their housing needs are greatest, yet as a class they have benefited least by the houses provided by the Housing Committee. It was hoped that by the process sometimes referred to as "filtering up" they would benefit indirectly. Possibly in time this may be so, but that will only be after the needs of other sections of the community have been fully satisfied. That time is probably still a long way off and meanwhile the overcrowding continues and is a reproach to our vaunted civilisation.

Something needs to be done, and to be done at once.

Very many of the worst cases of overcrowding are what may be called sociological in character and not necessarily due to house shortage at all. These are the cases of poor people with large families with a very narrow margin for rent, and who are living in houses altogether inadequate for their requirements. The wretched little houses occupied by this class are not always low rented, though usually so. These people, speaking generally, are not wanted by landlords, either private or municipal, and unless assisted by some outside agency it is often well-nigh impossible for them to extricate themselves from the circumstances as regards housing in which they find themselves. Meanwhile, their health and that of their children is being seriously prejudiced by this lack of proper house accommodation.

The writer's views on this question were embodied in a paper, under the title "Overcrowding in the Slums and How to Remedy

It," which he read at the National Housing Conference held at Buxton last November. Copies of this paper are available.

### **Arrangement between Health and Housing Committee as to the Allocation of certain Houses.**

The point of view of the Health Department and of the Housing Department is somewhat different as regards the question of overcrowding, which is not really very surprising. However, an arrangement has now been sanctioned by the City Council under which the Housing Committee will allow the Health Committee to nominate tenants and fix the amount of rent to be paid as regards 50 Corporation houses. It is intended that half of these shall be allocated to tenants whose houses are the subject of closing orders made by the Health Committee, and half to specially bad cases of overcrowding. The power given to the Health Committee to reduce the rent—when they consider this necessary in view of the circumstances of the prospective tenant—is a very important concession and anticipates one of the most important provisions in the Housing (No. 2) Bill now before Parliament. Economically it may be open to criticism, but then the whole of municipal housing enterprise is unsound if viewed from the point of finance. It is only on health and sociological grounds that it can really be justified.

### **Green Street—Sandacre Street Area Schemes.**

As was stated in the last report, a Slum Clearance Scheme has been launched, dealing with a congested area in the Green Street—Sandacre Street neighbourhood, the formal representation having been made and a resolution of the City Council passed (on 26th February, 1929), that an improvement scheme for the area be made.

Unfortunately, the uncertainty created by what is known as the "Derby Case," and the prospect of a new Housing Act has caused the scheme to be temporarily held up.

### **HUMANE SLAUGHTERING OF ANIMALS FOR FOOD.**

The by-law making the stunning of animals by a mechanically operated instrument prior to slaughter compulsory has now been in operation in Leicester for 16 months, and, speaking generally, no serious difficulty has been experienced in its enforcement. The Butchers' Association, though opposed to the passing of the by-law, particularly as regards sheep and pigs, has, since it came into operation, loyally helped to put it into effect.

### **SMOKE ABATEMENT.**

The cleansing from smoke of the atmosphere over thickly populated industrial areas still remains one of the great public



health problems which has not yet been practically solved. In theory it has been solved, viz., by the abolition of the combustion of raw coal and the substitution of smokeless fuel and the increased use of electricity and gas.

As regards the factory chimney it is possible, by the use of improved appliances and more skilled stoking, to reduce the emission of smoke to a minimum even if raw coal is used, but with the open domestic fireplace, the only remedy is the substitution of gas or electricity or the use of solid smokeless fuel. The writer has now used such a fuel in his own house practically exclusively for three years, and can testify that it is a very satisfactory substitute for coal, and costs no more than medium-priced coal, allowing for its increased efficiency. It is highly desirable in the interests of smoke prevention that the use of raw coal should be discouraged in every way, and in this connection I would urge that it is "up" to municipalities to set an example. The use of raw coal in all municipal offices should be discontinued and some solid smokeless fuel supplied in its place. If all local authorities throughout the country—including Leicester—would take this step, it would give an enormous stimulus to the production of such fuel.

### **NEW ORTHOPÆDIC AND LIGHT DEPARTMENT.**

By a joint arrangement between the Education and Health Committees, an Orthopædic and Light Department has now been provided at Richmond House, the Newarkes, in connection with the School Medical Service. An excellent building for the purpose has been erected and efficiently equipped.

It is intended for use by patients sent by either departments, the expense being shared on the basis of user, but the work will be under the control of the Education Committee and the Chief School Medical Officer, Dr. Allan Warner.

The new department was not opened during the year under review so need not be referred to further at present.

### **LOCAL GOVERNMENT ACT, 1929.**

The outstanding piece of legislation from the public health standpoint during the year under review was the passing of the Local Government Act, 1929. This was by far the most far-reaching and drastic measure affecting local government that has been enacted during the present century. The most important change enacted by it was, of course, the abolition of Boards of Guardians and the transfer of their functions, together with all property vested in them, to the County and County Borough Councils.



A somewhat unique provision was contained in Section 5, which enabled local authorities to "declare" that certain specified services hitherto carried out under the Poor Law Acts would in future be carried out under other Acts, e.g., the Public Health Act, M. & C.W. Act, Mental Deficiency Act, &c.

Comparatively few local authorities have acted under this provision. Apparently it was felt that not much material advantage was to be gained by "declaration." Leicester was one of those towns, however, that, being desirous of carrying out the intention of the new Act to its fullest extent, elected to "declare" under all heads (except as regards the care of the blind, who are well looked after in Leicester by voluntary agencies). As a result of this policy the institutional care of the sick is now carried out as a function of the Health Committee under the Public Health Act, 1875, and the Poor Law Infirmary at North Evington has been "appropriated," with the sanction of the Ministry of Health, as a public health hospital, and has been re-christened "The City General Hospital."

The policy decided upon by the Health Committee for the use of their new institution is that it shall be run on the lines of a first-class general hospital, dealing with all classes of cases, medical and surgical (excepting only certain infectious diseases), rather than as an "Infirmary" largely filled up with the aged and infirm. With this end in view it is proposed to deal with the latter class, so long as they do not require constant skilled nursing, elsewhere (for the present at the Swain Street Institution). Certifiable lunacy cases have been transferred to the City Mental Hospital, and certifiable mental defectives to the City Mental Deficiency Home at Leicester Frith, which has just been enlarged by the erection of two new blocks to accommodate 60 additional patients.

### **SUN BATHING : HELIOTHERAPY.**

Slowly, but surely, we are coming to realise the health-giving effects of exposure of the surface of the body to the direct rays of the sun.

Heliotherapy is becoming a familiar word. Those who are familiar with the excellent curative results obtained by heliotherapy in surgical tuberculosis at Leysin in Switzerland, at Alton in Hampshire, and at many other sanatoria—including our own Sanatorium at Groby Road—will need no convincing of the value of the sun's rays in the treatment of disease. It should be clearly understood, however, that the chief effect of sunlight is an indirect one, by increasing the natural powers of resistance to disease. In fact, the effect is largely in the nature of a "tonic." Many people who

pay a doctor a fee for a bottle of medicine as a tonic would do better to take a sun bath, for which no charge need be made.

When people benefit in health by a stay at the seaside and return home feeling "fit" and looking so well, the chief effect is produced by heliotherapy, for even on cloudy days at the seaside reflection from sea and sky greatly increases the actinic property of daylight (diffused sunlight).

Much of the benefit of the seaside could be obtained at home if more advantage were taken of such sunshine as there is ; but it must be allowed direct access to the skin. The interposition of thick clothing effectively destroys the beneficial effect of the sun. In this matter the modern young woman is much more sensible than any other section of the community.

It is true that for certain months in the year we do not get a great deal of sunshine in this climate, but that is really only the stronger reason for making the most of the sun when it does shine.

From the health point of view the cult of sun bathing now coming into vogue deserves every possible encouragement. Old conventions in the matter of dress ought not to stand in the way. Every local authority should be prepared to offer facilities for sun bathing, and this should usually be quite feasible in our public parks. All that is necessary is that the place selected for the "worship of the sun" should be screened off from the public gaze. Devotees can put on bathing costumes under their ordinary clothing before they leave home, so that all they need is to be allowed to slip off their sun-obstructive clothing and bask in the sun. Nothing beyond a sufficient number of seats (deck chairs) needs to be provided, and as no dressing-boxes or attendants should be necessary, the expense would be trifling. Yet when one thinks of the expense incurred (and quite rightly so) in catering for the needs of water bathers, no question of cost need stand in the way. Our own enterprising Parks and Recreation Grounds Committee, who have done so much to add to the amenities of Leicester's parks and recreation grounds, could render a further great service to the community by being pioneers in this matter. I believe that if satisfactory arrangements were made the public would soon take advantage of them. Incidentally it may be mentioned that this proposition has already been brought to the notice of the progressive Chairman of the Committee (Alderman Alfred Hill).

Perhaps the writer may be excused for adding a personal note. It is always desirable to practice what one preaches. Whilst these words are being written (during a week-end) he is sitting

at a table in a secluded corner of his garden taking a sun bath. He is wearing an appropriate sun-bathing costume, the style of which can be gauged when it is stated that it weighs exactly one ounce. During the present summer he has enjoyed many sun baths in this spot and believes he has benefited greatly in health thereby. But not many people are equally favoured in possessing a suitable place for really enjoying the sun, and certainly not that large class who have to dwell in the central congested districts of the city. It is on their behalf that this plea is urged.

### **THE TEACHING OF HYGIENE IN SCHOOLS.**

Attention is drawn to a valuable memorandum on the teaching of hygiene (including the hygiene of sex) in primary and secondary schools in the city by Dr. Allan Warner, School Medical Officer, which appears as an Appendix to his Annual Report for 1929.

Dr. Warner rightly stresses the fundamental importance of hygiene, and shows, as the result of an inquiry he has made at the request of the Board of Education, that whilst a good deal is being done in the direction of teaching hygiene in some schools, there is no uniformity, it not being a compulsory subject.

His conclusions are summed up as follows :—

“ If the nation really desires the systematic teaching of hygiene in all schools, it is clear that this subject must be made compulsory in both local and public examinations, for example, the Annual General Examination of Primary Schools, and the School-leaving Certificate of Secondary Schools. Alternatively, the Government might make a special grant to those schools that provide effective education in this subject throughout the school course.”

The argument against such a proposal is that the Curriculum is already overloaded, but as Dr. Warner points out, “ Hygiene is of vital importance, and care must be taken not to displace essentials by non-essentials in the Curriculum.”

### **CREMATION.**

The number of cremations carried out at the Leicester Crematorium during 1929 was 124, as compared with 61 in 1928, and with 68 in 1927. Such a large increase in one year is rather remarkable and indicates that cremation is becoming more popular. During the present year, 1930, the increase is being well maintained.

In this connection it is of interest to recall that the Leicester Crematorium was opened in July, 1902, and in the first eleven years the total number of cremations was only 142.

The Leicester Crematorium serves a large district in addition to the city. Of last year's cremations only 46 were from the city and 78 from districts round about. Hitherto Nottingham has had no crematorium so that most of the cremations from that city have come to Leicester. But a crematorium has now been provided (at Wilford Hill Cemetery) for Nottingham, and henceforth Nottingham cremations will, of course, be carried out there.

### BIRTH CONTROL.

Undoubtedly, public opinion has changed greatly in recent years in its attitude to what is commonly referred to as birth control. Birth control is coming to be regarded as a matter very closely bound up with Public Health, and especially with that branch known as Maternity and Child Welfare.

Although the writer has for many years held definite views on this subject and has not hesitated to give expression to them as occasion offered, he has hitherto refrained from referring to the subject in his Annual Health Reports on account of its controversial character.

The time has come, however, when some reference to the subject would seem to be not only permissible but even incumbent, for the Leicester Health Committee have recently passed a resolution authorising their Medical Officers to give birth control information to married persons desiring it.\*

At the time of writing this resolution has still to be confirmed by the City Council, but subject to such confirmation they have passed a further resolution appointing their Medical Officer of Health as their representative on the newly-formed National Birth Control Council.

A serious obstacle to any action by Local Authorities has hitherto existed owing to the fact that the Ministry of Health have repeatedly refused to "sanction" the giving of birth control information by the Medical Officers of Municipal Clinics. Whilst it cannot be said that the Ministry have yet abandoned this attitude, they have now made it clear that they have no intention of taking any action (even if they have any power to do so, which is doubtful), in the event of any Medical Officers giving such information.

The following is from *The Lancet*, March 1st, 1930 :—

Mr. Simon asked the Minister of Health under what statute local authorities were prohibited from giving information regarding birth control to nursing mothers attending

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\*The exact wording of the resolution was as follows: "That this Committee raises no objection to the Medical Officer of Health and Medical Officers in attendance at Ante-Natal and Infant Welfare Clinics in the City giving advice relating to Birth Control to married persons who consult them, in any cases where such advice seems to them to be called for."



Maternity and Child Welfare Centres who needed this advice on medical grounds. Mr. Greenwood replied, " I am not aware of any such statute."

Further, on March 3rd, 1930, Mr. Greenwood, replying to Mr. Simon, said that the Ministry of Health had never withheld or threatened to withhold grants payable to local authorities in respect of Maternity and Child Welfare work on the ground that Medical Officers had given information on birth control to women attending the centres.

Sir John Ramsay, in a letter to *The Medical Officer*, of June 7th, in which he refers to the above, says that :

" If in future doctors at Welfare Centres decline to give information on birth control to patients whom they consider to be in need of it, the responsibility for their refusal must rest with them. It can no longer be put on the Minister of Health."

### BIRTH CONTROL CLINICS.

Pending the time when Local Authorities generally will regard it as part of their duty to provide facilities whereby poor married women desiring it, and requiring it, can obtain medical advice on the subject of birth control, a number of Birth Control Clinics have been provided by voluntary effort in a number of towns. The following is a list :—

London (4 Clinics).	Salford.	Birmingham.
Wolverhampton.	Glasgow.	Rotherham.
Cannock.	Oxford.	Newcastle-on-Tyne.
Cambridge.	Aberdeen.	Nottingham.
Manchester.		

A society exists, under the title of the Society for the Provision of Birth Control Clinics, for the express purpose of encouraging the founding of new clinics.

The following letter received by your Medical Officer of Health on the day these words are being written may be quoted as illustrating by means of a concrete example the kind of cases which Birth Control Clinics are " out " to help.

Dear Sir, [COPY.] ..... , Leicester,  
July 18th, 1930.

I hope you will pardon the liberty I am taking in writing to you. Would you be kind enough to give me some advice on Birth Control? My husband has been unemployed for the greater part of this year and for many weeks last year. He is a bricklayer. I have four children, the eldest being 7 years, and the youngest four weeks. Had it not been for the generosity of friends we could not have met the expense of the last confinement. We just manage to find food, but the children's clothing and shoes have come from relatives who have assisted us. So you see I do not want another baby coming along, and I should be very grateful if you could give me the help I need. Thanking you in anticipation,—Yours faithfully,

## GENERAL PROVISION OF HEALTH SERVICES FOR THE CITY OF LEICESTER.

The following statement is included in the Report as requested by the Ministry of Health.

Hospitals provided or subsidised by the Sanitary Authority :—

A. (1) **For Infectious Disease.**—The City Isolation Hospital, Groby Road. 130 beds.

(2) **For Smallpox.**—Smallpox Hospital, Anstey Lane. 48 beds. When not required for smallpox it is used for treatment of tuberculosis in children. Is administered as a branch of the Groby Road Hospital.

B. (1) **Tuberculosis.**—The Sanatorium, Groby Road. 164 beds, of which approximately 72 are for ambulant (early) and “observation” cases, 62 for “hospital” cases, and 30 for non-pulmonary (“surgical”) cases. In addition, when not required for smallpox the Anstey Lane hospital provides accommodation for 48 children suffering from pulmonary tuberculosis.

The Isolation Hospital and Sanatorium is a combined institution with one administration, having a total accommodation of approximately 342 beds.

A scheme for a new Children's Sanatorium, to be erected on land adjoining the Groby Road site belonging to the Corporation and at present let for allotments, is under consideration. This would take the place of the Anstey Lane Hospital which would then be reserved solely for its primary purpose of a Smallpox Hospital. The buildings at the latter institution are very old (built originally in 1872) and constructed of wood.

### **Convalescent Sanatorium.**

Mention made here of the Convalescent Sanatorium, “Home Place,” Holt, which has been presented to the Corporation by the Health Week Committee, and which was provided by a special fund raised for the purpose. This at present provides accommodation for 22 patients and staff, and will be a very valuable asset. Patients were first sent there, June, 1929. (For further details see ante, p. 20).

For separate report of the Isolation Hospital and Sanatorium, see Appendix II.

(2) **Maternity.**—The Municipal Maternity Home, Westcotes Drive. 26 beds. A scheme is being considered for providing increased accommodation.



There is also a voluntary lying-in institution, the Leicester and Leicestershire Maternity Hospital, Causeway Lane, 26 beds, but this is not subsidised by the Sanitary Authority.

(3) **For Children.**—The Sanitary Authority provides no hospital for children other than that mentioned above for tuberculosis.

(4) **For Orthopædics.**—The Corporation makes no provision for institutional treatment of orthopædic cases other than tuberculosis, but there is a separate block for children at the Leicester Royal Infirmary. A certain number of orthopædic cases are admitted there, and there is an excellent Orthopædic Department for out-patients. The Royal Infirmary is not subsidised by the Sanitary Authority. An orthopædic and light department for out-patients has now been opened (June, 1930), at Richmond House (see ante, p. 46).

**Institutional Provision for Unmarried Mothers, Illegitimate Infants and Homeless Children.**—The only provision apart from the Poor Law, is St. Mary's Home, Westleigh Road, at which nine beds are reserved for V.D. cases in unmarried women and mothers. See Appendix V.

**Ambulance Facilities.**—The Sanitary Authority has three motor ambulances available for infectious cases and tuberculosis. The Corporation Fire Brigade has two motor ambulances for non-infectious and accident cases, and the Red Cross also has two. The latter are not subsidised by the Sanitary Authority.

Since the coming into operation of the Local Government Act the Health Committee have become possessors of a fourth motor ambulance, which belonged to the Guardians and which is attached to the City General Hospital.

**Clinics and Treatment Centres.**—The Health Committee have a Day Nursery conveniently situated in the centre of the City with accommodation for the day care of 60 babies and toddlers. They also control 15 Infant Welfare Centres (Schools for Mothers) and a Milk Depot (for the sale of Dried Milk).

The Tuberculosis Dispensary was formerly carried on at the Health Offices in Grey Friars. The accommodation was cramped and the situation noisy. A scheme for new and separate premises has now been carried out. (See Appendix I.)

A Cancer Clinic, almost the only one of its kind in the country, is also held at the Health Offices (see p. 23).



APPENDIX I.

# REPORT

OF THE

## Tuberculosis Dispensary

FOR 1929

By WYVILLE S. THOMSON, M.D., D.P.H., Edin.,  
*Tuberculosis Medical Officer.*

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### Premises.

During the year under consideration the Tuberculosis Dispensary, Health Department, Grey Friars, remained the centre for dealing with all the work in connection with Tuberculosis in the City.\*

### Staff.

There has been no change in the Medical Staff, the Medical work having been carried on by Dr. Thomson with the half-time assistance of Dr. Lawrie.

The Nursing staff normally consists of three fully trained nurses. During the first six months of the year, however, following the resignation of Nurse Keeling, we had to carry on with only two, and as one is required continuously for indoor duty, only one nurse was available for visitation. Early in August another nurse was appointed, since which time two nurses have been regularly engaged in the visitation of tubercular patients.

The clerical work is still in the capable hands of Miss Heaton with Miss Battle as assistant.

### Notification Register.

Tuberculosis being a notifiable disease, all persons suffering from it must be notified, and their names are entered in the Register.

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\*On 11th February, 1930, the Tuberculosis Dispensary was removed to much larger and more convenient premises situated at 59 Regent Road.

At the beginning of 1927 the Notification Register was thoroughly revised. The names of all patients who had left the district were removed, as well as those whom we could no longer regard as suffering from Tuberculosis, and only those with definite tubercular disease were retained on the register.

The following are the figures on the Notification Register on 31st December, 1929 :—

PULMONARY			NON-PULMONARY			TOTAL CASES
Males	Females	Total	Males	Females	Total	
1,644	1,588	3,232	161	168	329	3,561

### Notifications.

There has been a considerable reduction in the number of persons notified as suffering from Tuberculosis during the past year—734 as compared with 785 in 1928. The Pulmonary Notifications were 657 as compared with 668 in 1928, and the non-pulmonary were 77 as compared with 117 in 1928. It will be noticed that the number of notifications is apt to fluctuate considerably from year to year, the lowest figure recorded since 1918 being 602 and the highest 828.

Of the 657 pulmonary notifications 261 were reported by your Tuberculosis Officer, and 12 of the 77 non-pulmonary cases.

The following table gives the number of notifications since 1918 :—

1918	..	Pulmonary, 746 ; Non-pulmonary, 82 ; Total, 828
1919	..	658                      ,,                      47                      ,,                      705
1920	..	572                      ,,                      59                      ,,                      631
1921	..	497                      ,,                      105                      ,,                      602
1922	..	566                      ,,                      43                      ,,                      609
1923	..	692                      ,,                      71                      ,,                      763
1924	..	725                      ,,                      65                      ,,                      790
1925	..	606                      ,,                      77                      ,,                      683
1926	..	650                      ,,                      77                      ,,                      727
1927	..	700                      ,,                      80                      ,,                      780
1928	..	668                      ,,                      117                      ,,                      785
1929	..	657                      ,,                      77                      ,,                      734

The following table gives the sex and age period of those notified during 1929 :—

Age Periods	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 & up.	Total
Pulmonary												
Males ..	..	8	48	20	20	39	57	56	52	25	5	330
Females ..	..	10	50	22	41	58	75	31	22	12	6	327
Non-pulmonary												
Males ..	2	8	11	3	4	1	6	1	3	..	..	39
Females ..	1	6	13	3	2	4	6	2	..	..	1	38

## Deaths.

Last year we were able to report that though there had been a slight increase in the number of notifications there had been a considerable reduction in the number of deaths from Tuberculosis. Unfortunately 1929 shows a condition almost the reverse. There has been a considerable reduction in the number of notifications, but the number of deaths has increased. The figures for 1929 are 266 pulmonary and 53 non-pulmonary, as contrasted with 265 pulmonary and 42 non-pulmonary in 1928. There has therefore been an increase of one death from pulmonary and 11 from non-pulmonary Tuberculosis during the year 1929. The following table gives the number of deaths each year since 1918 :—

1918	..	Pulmonary, 316 ; Non-pulmonary, 82 ; Total, 398
1919	..	.. 264 .. 62 .. 326
1920	..	.. 255 .. 72 .. 327
1921	..	.. 278 .. 73 .. 351
1922	..	.. 294 .. 67 .. 361
1923	..	.. 285 .. 36 .. 321
1924	..	.. 287 .. 62 .. 349
1925	..	.. 305 .. 59 .. 364
1926	..	.. 282 .. 43 .. 325
1927	..	.. 283 .. 63 .. 346
1928	..	.. 265 .. 42 .. 307
1929	..	.. 266 .. 53 .. 319

An analysis of the pulmonary deaths which occurred during 1929 shows, in the first portion of the following tables those who had had Sanatorium treatment, the stage of the disease when first examined and the length of time elapsing between notification and death. In the second portion of the table similar information is given about those who had not had Sanatorium treatment. In the third portion details are given of those who were never examined at the Dispensary—chiefly patients in other institutions, e.g., the Mental Hospital and North Evington Infirmary. Included here are also those better class patients who did not desire examination at the Dispensary.

# ANALYSIS OF DEATHS.

PULMONARY CASES HAVING HAD SANATORIUM TREATMENT.												
Stage when first notified or first examined				Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
Stage I.	T.B.—ve	43	..	..	..	..	..	1	2	2	3	35
Stage II.	T.B.—ve	15	..	..	2	..	1	..	2	2	2	6
Stage III.	T.B.—ve	1	..	..	..	..	..	1	..	..	..	..
Stage I.	T.B.+ve	28	..	..	1	..	3	1	4	3	9	7
Stage II.	T.B.+ve	48	..	3	4	3	10	8	3	6	3	8
Stage III.	T.B.+ve	18	..	..	2	1	5	2	2	..	3	3
Total	153	..	..	..	3	9	4	19	13	13	20	50

PATIENTS NOT HAVING HAD SANATORIUM TREATMENT.												
Stage when first notified or first examined.				Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
Stage I.	T.B.--ve	16	..	2	1	..	2	1	1	2	1	6
Stage II.	T.B.—ve	8	..	..	1	1	..	1	3	1	1	..
Stage III.	T.B.—ve	8	..	3	2	1	1	..	..	..	1	..
Stage I.	T.B.+ve	3	..	1	1	..	1	..	..	..	..	..
Stage II.	T.B.+ve	12	..	..	1	1	4	4	..	1	1	..
Stage III.	T.B.+ve	12	..	3	2	2	2	3	..	..	..	..
Total	59	..	..	9	8	5	10	9	4	4	4	6



**PULMONARY CASES NOT EXAMINED IN CONNECTION WITH  
THE DISPENSARY.**

TOTAL	Died within 1 month of notifica- tion.	Within 2 months	Within 3 months	Within 6 months	Within 12 months	Within 18 months	Within 2 years	Within 3 years	Lived 3 years or over
38	15	7	4	4	..	1	..	2	5

These three tables account for 250 deaths. In addition there were 16 deaths of patients who had never been notified as suffering from Tuberculosis. This gives the total of 266 pulmonary deaths.

As regards the non-pulmonary deaths, it will be noticed that the figure (42) for 1928 was considerably below the average. That for 1929 (53) shows a closer approximation to the average figure. An analysis of these deaths shows that a large proportion (37 out of 53) were due to acute forms of Tuberculosis, 29 dying from Meningitis and 8 from Miliary Tuberculosis. Sanatorium treatment is of little or no avail in such cases, and none of them had had Sanatorium Treatment. Of the remaining 16, 11 were due to Tuberculosis of the intestines, 1 to Tuberculosis of the Spine and 4 to Tuberculosis of the Kidneys, bladder, &c. Only one out of the 53 cases had had Sanatorium Treatment.

### **Dispensary Register.**

At the request of the Ministry of Health, a register called the Dispensary Register (not to be confused with the Notification Register) was commenced in 1926. In this are entered the names of all patients examined at or in connection with the Dispensary. Many of those examined are, of course, found to be non-tubercular. Others have to be examined repeatedly before one can come to a definite decision. As soon as a negative decision is arrived at the name is crossed off the Register. Similarly the names of those patients who remove to other areas outside the City boundary are taken off, and an intimation is sent to the Medical Officer of Health of the district to which they remove. Also on the death of a patient the name is removed, so that the Register, which is kept thoroughly up to date, contains the names of all tubercular patients as long as they are under Dispensary supervision.

The number on this Register is likely to be smaller than that on the Notification Register, as those who are not examined at the Dispensary (e.g., better class patients and those in institutions such as North Evington Infirmary, Mental Hospital, &c.), do not appear in it.

The following table recently made out for the Ministry of Health from information contained in this Register may prove of interest :—

#### ANALYSIS OF CASES ON DISPENSARY REGISTER

DIAGNOSIS	Pulmonary				Non-Pulmonary				Total			
	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<b>A New Cases examined during the year :—</b>												
(a) Definitely T.B. ..	174	181	53	54	9	9	14	13	183	190	67	67
(b) Doubtfully T.B. ..	..	..	..	..	..	..	..	..	34	32	12	9
(c) Non-Tuberculous..	..	..	..	..	..	..	..	..	94	78	45	37
<b>B Contacts examined during the year :—</b>												
(a) Definitely T.B. ..	2	7	11	9	..	1	1	..	2	8	12	9
(b) Doubtfully T.B. ..	..	..	..	..	..	..	..	..	..	1	6	1
(c) Non-Tuberculous ..	..	..	..	..	..	..	..	..	15	29	64	73
<b>C Cases written off Dispensary Register :—</b>												
(a) Cured .. ..	6	7	3	2	2	4	..	3	8	11	3	5
(b) Diagnosis not confirmed or non-tuberculous .. ..	..	..	..	..	..	..	..	..	135	133	116	124
<b>D Number of Persons on Dispy. Register on Dec. 31st, 1929 :—</b>												
(a) Diagnosis completed .. ..	939	968	486	332	52	70	76	69	991	1038	562	451
(b) Diagnosis not completed .. ..	..	..	..	..	..	..	..	..	22	27	10	..
Total patients on Dispensary Register on December 31st, 1929 = 3,104												
1. Number of persons on Dispensary Register on January 1st, 1929 .. ..	2,814				3. Number of patients transferred to other areas and cases "lost sight of" ..	88						
2. Number of patients transferred from other areas and "lost sight of" cases returned .. ..	71				4. Number of observation cases under A (b) and B (b) above, in which the period of observation exceeded two months .. ..	35						

#### Tuberculosis Dispensary as the "Centre for Diagnosis."

The Tuberculosis Dispensary continues to hold its place as the "Centre for Diagnosis," and doctors have no hesitation in sending patients whenever they have any doubt as to the presence or absence of Tuberculosis. Notes from 114 different doctors requesting an opinion on 486 cases were received and dealt with during the past twelve months. In addition, many patients, not under medical attention, called on their own initiative desiring to know whether they had consumption.

Contacts to the number of 190—chiefly those with symptoms which might be due to tubercular trouble—have been repeatedly examined. In this way one finds cases in the early stages of the disease.

The Ministry of Pensions regularly send their cases for examination, in many of whom an opinion is desired as to the presence or absence of Tuberculosis. The number of these examinations has naturally fallen considerably during recent years. 33 examinations and reports were made on these cases as compared with 67 last year and 161 in 1927.

### Clinical Examinations.

Altogether 3,332 clinical examinations were made, an increase of 300 on the previous year. Particulars are as follows :—

	Men.	Women.	Children.	Total.
First examinations	346	333	335	1,014
Re-examinations	638	699	981	2,318
	<hr/> 984	<hr/> 1,032	<hr/> 1,316	<hr/> 3,332

### Bacteriological Examinations.

Bacteriological examinations to the number of 1,458 have been made for the tubercle bacillus, as compared with 1,297 in 1928. Of these 447 were examined for doctors in practice in the City, and the remainder were obtained from patients examined at the Tuberculosis Dispensary. Sputum examination, if there be any expectoration, forms part of the complete examination of every patient sent for an opinion, before reporting to the doctor.

The following figures give the results of examinations :—

Nature of Specimen	Positive	Negative	Total
Specimens of Sputum :—			
From Practitioners.. ..	63	384	447
From Patients examined at Dispensary .. ..	278	722	1,000
Specimens other than sputum ..	—	—	11
	<hr/> 341	<hr/> 1,106	<hr/> 1,458

### **Patients Passed for Sanatorium Treatment.**

The "Admissions Committee," consisting of two or more members of the Hospital and Dispensary Committee, attends at the Tuberculosis Dispensary each Monday afternoon, and, in conjunction with the Tuberculosis Officer and Medical Superintendent of the Sanatorium, interviews and selects from patients examined during the previous week, cases for Sanatorium Treatment. During the past year 548 patients were passed for a course of Sanatorium Treatment; at Groby Road Sanatorium in the case of 419 adults (of whom 9 were surgical) and 13 children (surgical cases), and at Anstey Lane (latterly Groby Road Sanatorium) in the case of 116 children (pulmonary cases). In 1928 the total was exactly the same—548, being 388 adults, 15 children (surgical cases) and 145 children (pulmonary cases).

Eight of the adult pulmonary cases had previously received Sanatorium Treatment as children.

Unfortunately, owing to our limited accommodation, many patients who desired admission or re-admission to Sanatorium had to be refused. For months back the waiting list has been very heavy, and often a month or two months, or even more, elapses between a patient being passed for admission to Sanatorium and his entering the institution.

During the greater part of the year, owing to the continued prevalence of smallpox, the Children's Sanatorium at Anstey Lane has had to be used as a Smallpox Hospital—the purpose for which it was originally intended. Accommodation has been provided in one of the blocks of the Isolation Hospital for 30 children with Pulmonary Tuberculosis. By this means it has been found possible to provide Sanatorium Treatment for 116 children during the past year.

### **Patients on Dispensary Treatment.**

Medical benefit is available for most patients by means of the State Insurance, Public Medical Service, &c., so that only those patients not so provided for are dealt with at the Dispensary. During the year 290 patients received treatment at the Dispensary, and at the end of the year there were 146 patients attending the Dispensary each week. All other patients are advised to attend periodically for advice.

Those children who have had a course of treatment and been discharged from Sanatorium are advised to attend the Dispensary once a week in order that they may be kept under careful supervision. When fit for school an intimation is sent to the School Medical Officer.

### **Attendances.**

The total number of attendances of patients at the Tuberculosis Dispensary during the year was 12,336 (as compared with 11,672 in 1928), a weekly average of nearly 250.

### **Domiciliary Treatment.**

Those insured patients under the State Insurance who, for one reason or another, do not receive Sanatorium Treatment, besides others discharged from the Sanatorium, are recommended for "domiciliary treatment" under their panel doctors. An intimation to this effect is sent to the doctor, and quarterly reports on the patient's condition are sent by him to the Tuberculosis Officer. During the year 435 patients were granted Domiciliary Treatment, and at the end of the year 271 insured patients were receiving such treatment. 681 quarterly reports were sent in regarding patients under domiciliary treatment.

### **Visits.**

One of the nurses resigned towards the end of 1928 and was not replaced until August, 1929. This meant that we had to carry on with only two nurses. As one of these is constantly required indoors, only one nurse has been available for visitation during the greater part of the year. The result is that the number of visits is again low—6,100 in 1929 as compared with 6,163 in 1928 (a year when we were also short-handed for several months). We have now two nurses visiting constantly. They should manage to do 8,000 to 10,000 visits a year. Our endeavour is to keep in touch with every patient as long as his name remains on the Dispensary Register. Advice, both verbal and printed, is given. Full particulars are obtained as to the home conditions, contacts, &c. The number of visits paid by the Medical Officer for the purpose of consultation was 363 as compared with 351 in 1928.

### **Sleeping Shelters.**

Eight ex-sanatorium patients have had the use of sleeping shelters, one for over 6 years, one for over 4 years, two for over 2 years, two for over 12 months and two for under 12 months.

Most of the sleeping shelters, which have been in use for many years, are now almost completely worn out. New ones are being purchased as required.

Unfortunately those persons most requiring shelters very often have not the necessary ground on which they could be erected.



### **Additional Nourishment.**

The Health Committee grant milk to necessitous cases, under arrangements made by the Ministry of Health. They can do so up to a sum not exceeding £2 per thousand of the population per annum, and are thus enabled to carry on the grant formerly made by the Insurance Committee. Now, however, all persons, whether insured or non-insured (e.g., children), can have this benefit.

In April, 1927, the Committee decided to purchase only Grade A. (T.T.) milk for this purpose.

Mr. Councillor C. E. Keene has again dealt with the applications for milk. He attends at the Dispensary every alternate Friday, and reviews each case every four weeks. I desire here to record my appreciation for the very thorough way in which he deals with them.

During the past year 172 persons were granted milk (as compared with 180 in 1928) free of charge, at a total cost of £461 8s. 10d. Last year the total expenditure was £459 2s. 6d., and for 1927 the figure was £300 15s. 11d.

At the end of the year 98 patients were in receipt of a daily allowance of free Grade A (T.T.) milk.

### **Nursing of Bedridden and Surgical Cases.**

The Health Committee, by an arrangement with the District Nursing Association, provide the services of a nurse to assist bedridden cases of Pulmonary Tuberculosis and those Surgical cases in need of dressings, &c. This work is under the general supervision of the Tuberculosis Officer, and each patient having the services of a district nurse is periodically visited by one of the Tuberculosis Health Visitors. During the past year 96 cases received assistance in this way. Altogether 4,834 visits were paid at a total cost of £241 14s. 0d. The figures in the previous year were 5,042 costing £252 2s. 0d.

### **After-Care.**

Many of the previous headings such as visits, use of sleeping shelters, additional nourishment, nursing of bedridden cases, &c., might well have been included under the term "After-Care." A very important branch of the work of the Dispensary consists in looking after patients after their discharge from Sanatorium.

The After-Care Committee, with the Lord Mayor as Chairman, meets once a quarter and deals with reports from the Tuberculosis Officer and each of the nurses.



We have at the present time 3,104 patients with signs of active disease on our Dispensary Register. Our endeavour is to keep in touch with each of these patients by visitation by the nurses and regular examination at the Dispensary as long as their names remain on the Register.

It is found that the patients very much appreciate these visits, and the knowledge that they are not allowed to drift after leaving Sanatorium stimulates them to help themselves. They seek advice in many different directions, and the nurses have been able to help and encourage them in many different ways.

A difficult problem is finding suitable work for tubercular patients. One cannot blame employers for hesitating to engage them. Many of them are only fit for light work and cannot be depended upon to turn up with the same regularity as healthy individuals. Light outdoor work, such as would be desirable for tubercular persons, is extremely difficult to obtain and is almost always unremunerative, so for a married man with dependents it is out of the question. Yet we know that in many cases a return to arduous indoor work is simply asking for trouble.

This problem of suitable work, difficult in normal times, is at present very much accentuated when so many able-bodied men are out of work.

Applications for financial assistance from 23 patients were dealt with, and clothing, dentures, &c., granted where necessary. The total cost was £35 17s. 4½d. For 1928 the sum expended was £55 9s. 4d., for 1927 £40 12s. 4d., for 1926 £51 4s. 10d., and for 1925 £71 1s. 9d.

Thanks to the kindness of Canon Sturdee, for the fifth year in succession, we received a large number of toys, which were distributed by Miss Heaton and Miss Battle during the past Christmas to about 100 of the poorer class children who attended the Dispensary. Needless to say, these were very much appreciated.

### **New Premises.**

The premises at Grey Friars have for long been quite inadequate to deal with the ever-increasing number of attendances at the Tuberculosis Dispensary. New premises situated at 59 Regent Road have been found which should prove suitable in every way.

In order that the Dispensary may be brought thoroughly up to date it is hoped that an X-ray installation, for which there is ample room, may soon be obtained. The value of X-ray examination as an aid to diagnosis is now fully recognised and every modern Dispensary is in possession of one.

WYVILLE S. THOMSON.



## APPENDIX II.

# Report on the Isolation Hospital and Sanatorium for the Year 1929.

By H. STANLEY BANKS, M.A., M.D. (Glas.), D.P.H. (Camb.).  
*Medical Superintendent.*

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The number of cases of the various diseases admitted, discharged and died during the year is shown in Table A at the end of this report. In this table the crude figures have been adjusted by allowing for altered diagnosis.

## GENERAL STATISTICS.

### SCARLET FEVER.

Number of cases discharged (with diagnosis of Scarlet Fever on admission)	..	..	345
Altered Diagnosis	..	..	32
Number of verified cases of Scarlet Fever dis- charged	..	..	313
Number of Deaths	..	..	Nil

### Cross Infections

With Measles	..	..	2
With Chickenpox	..	..	1
"Return" Cases (verified for diagnosis)	..	..	4
"Return" case rate per cent. of discharges	..	..	1.2

## Complications.

	No. of Cases.	Results.	
Present on admission	.. 8	cleared up.	8

### Occurring after admission—

Acute Suppurative Otitis Media	7	cured	.. 7
(i.e., perforation healed : ears dry 7 days).			
Acute Nephritis ..	.. 2	cleared up	.. 2
Acute Arthritis (mild)	.. 1	cleared up	.. 1
Albuminuria ..	.. 4	cleared up	.. 4
Secondary Tonsillitis	.. 1	cleared up	.. 1
Secondary Adenitis	.. 11	cleared up	.. 11
Rhinitis .. ..	.. 4	cleared up	.. 4
Abscesses ..	.. 11	cleared up	.. 11
Minor Skin Sepsis ..	.. 5	cleared up	.. 5
Septic Pneumonia ..	.. 1	cleared up	.. 1

---

Total complications occurring after admission .. .. 47

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Complication-rate of cases discharged = 15 per cent.

**Average duration of residence in hospital of all verified cases, 21 days.**

The reduction in the average period of residence in hospital due to the increasing use of scarletinal anti-toxin, at first intra-muscularly and later, intra-venously, may be shown thus :—

Year.	Average period in hospital (all Scarlet Fever cases discharged).		
1927 (1st quarter)	..	..	.. 52 days
1927 (2nd ,, )	..	..	.. 48 ,,
1927 (3rd ,, )	..	..	.. 44 ,,
1927 (4th ,, )	..	..	.. 42 ,,
1928 .. ..	..	..	.. 24 ,,
1929 .. ..	..	..	.. 21 ,,

## Treatment.

It is of great interest to report the results of another year's trial of **intra-venous scarletinal anti-toxin**.

The number of cases receiving this treatment was 172 or 55 per cent. of the discharges. These included all the well-marked and severe cases, but not cases admitted after the 4th day of disease.

In the intra-venous series, with very few exceptions, the temperature fell by crisis and all toxæmic symptoms disappeared within

12 hours, while the local inflammation œdema and ulceration (if any) of the fauces were much reduced and the eruption was beginning to fade or was actually faded within the same period. As a general rule **no desquamation occurred**, or it was represented by a fine powdering, chiefly seen at the tips of the fingers.

The acute stage having been cut so short, there were, as a rule, no after-effects of scarlet fever whatever. In the vast majority of the cases it proved to be perfectly safe to allow patients to get up in about a week and to be discharged from hospital in about a fortnight. As a matter of interest, however, arrangements were made for a medical examination (including a urine test) of all intra-venous cases on Monday fortnight following their discharge. All but twelve attended for the purpose, and the defaulters were followed up at their homes. The only defects found at these examinations which might in any way be attributed to scarlet fever, were two cases in which minor skin abrasions were found at the angle of the mouth, nares and finger. Almost without exception these patients were well and cheerful.

**Secondary Pyrexia**, lasting for three days, occurred in seven cases or 4 per cent. It commenced about three days after the injection, was unaccompanied by any complaint, symptom or sign and seemed to be of no clinical significance.

The actual **complications** occurring in the intra-venous series (excluding two which were present on admission) numbered nine, occurring in seven individuals, viz. :—

#### Major Complications.

			Result.	Duration of residence in hospital.
(1)	f.	age 6. Acute Suppurative Otitis Media and Acute Nephritis (mild) ..	cured	52 days
(2)	f.	age 4. Septic Pnuemonia associated with Septic Scarlet Fever following Tonsillectomy ..	cured	53 days

#### Minor Complications.

(3)	f.	age 7. Albuminuria 9 days ..	cured	52 days
(4)	m.	age 5. Abrasions about mouth ..	cured	34 days
(5)	m.	age 4. Abrasions about nose and ear .. ..	cured	26 days
(6)	f.	age 21. Mild Arthritis of wrist and ankle .. ..	cured	23 days
(7)	f.	age 9. Rhinorrhœa and Septic Finger .. ..	cured	27 days



Theoretically it should be possible to eliminate complications altogether, but in any large series a few cases are bound to occur in which dosage of anti-toxin is insufficient, or the patient's reaction is deficient or the complicating inflammatory process has commenced early and is really present though not evident on admission. It will be generally agreed that a complication-rate of 5.2 per cent. is exceedingly low in any series of scarlet fever cases, however mild, and it is to be remembered that the series in question included all the more severe cases and quite a few of the "septic" type.

Intra-venous injection of scarletinal anti-toxin, which has now been used in this hospital in over 600 cases, was the method of choice in the treatment of scarlet fever. Nevertheless, only 55 per cent. of the cases were actually so treated. The remainder were treated with intra-muscular anti-toxin or without anti-toxin for various reasons. **Intra-muscular anti-toxin in therapeutic dosage** was used in 32 cases or 10.2 per cent. because :—

Veins were inaccessible .. .. .	9 cases.
The child was under 2 years of age ..	4 „
There was a history of anti-toxin previously given for Diphtheria .. .. .	5 „
The general condition was very poor, with or without Bronchitis .. .. .	7 „
Intra-venous injection was inconvenient at the time of admission .. .. .	7 „
Total .. .. .	<hr/> 32 <hr/> „

The complication-rate in this series was 40.6 per cent. and the average duration of residence in hospital was 30 days.

**Intra-muscular anti-toxin** was injected either as a **pro-phylactic** or for treatment in 30 cases or 10 per cent. of the discharges, because the disease was exceedingly mild (13 cases), or doubtful (17 cases).

The complication-rate in this very mild series was 3.6 per cent. and the average duration of residence was 21 days.

**No anti-toxin** was used in 71 cases or 23 per cent. because :—

Admission was <b>late</b> in the disease (on or after 5th day) .. .. .	36 cases.
Some were very mild .. .. .	25 „
Some were doubtful scarlet fever .. .. .	9 „
One was under two years of age .. .. .	1 „
Total .. .. .	<hr/> 71 <hr/> „

The complications in these cases were : present on admission, 2 ; occurring after admission, 18 ; giving a complication-rate for the latter in the " no anti-toxin " series of 25.3 per cent. of cases discharged. The average duration of residence in this series of late and mild or doubtful cases was  $26\frac{1}{3}$  days.

In addition to those detailed above, there were 8 cases of scarlet fever with other concurrent infectious disease present in addition. Some of these were treated with, and some without, anti-toxin, but as their course was influenced by the other disease present they have been excluded from the above analysis.

## DIPHTHERIA.

### General Statistics.

Number of Cases discharged .. .. .	237
Altered Diagnosis .. .. .	30
Number of verified cases discharged .. ..	207
Number of Deaths .. .. .	13
Death-rate per cent. of verified and completed cases .. .. .	5.9
Death-rate per cent. of verified and completed cases (excluding laryngeal cases and cases dying within 24 hours of admission) .. .. .	2.7

### Causes of Deaths.

#### (a) Severe Toxic or Malignant Diphtheria (Group A).

	No. of Cases.	Day of disease on admission.
Moribund on admission ..	2	7th and 12th.
Hæmorrhagic on admission ..	3	4th, 5th and 7th.
Became Hæmorrhagic after admission .. ..	2	5th and 8th.
Early Heart Failure .. ..	1	7th.
Total ..	8	

#### (b) Septic Diphtheria.

Case (1) m. Age 35. Admitted with gangrenous fauces accompanied by much œdema and exudate : Vincent's bacilli and spirilla found in smears from throat swabs : throat swabs negative for K.L.B. until day of death, i.e., 3 days after admission.

Case (2) f. Age 34. Admitted with great œdema and sepsis of fauces and surrounding parts including larynx. Throat swab positive for K.L.B. Tracheotomy performed. Patient rapidly became hæmorrhagic and died within 24 hours of admission.

### (c) Laryngeal Diphtheria.

Case (1) m. Age 2 years. Moribund on admission ; died within an hour.

Case (2) m. Age  $2\frac{1}{4}$  years. Admitted in extremis: died after tracheotomy.

Case (3) m. Age 2 years. Admitted with dyspnœa, pallor and cyanosis: died after tracheotomy.

### Classification of Diphtheria Cases.

During the past three years the following classification has been adopted in this hospital :—

**Group A** (malignant or severely toxic) have five outstanding clinical features: (1) extensive membrane covering fauces and **palate**, and accompanied by œdema; (2) cervical adenitis with large peri-glandular œdematous swelling; (3) nasal discharge; (4) typical and marked fœtor; (5) severe toxic symptoms.

**Group B** (moderately toxic) have the same five features to a modified extent, viz.: (1) membrane extends at least on to the pillars of fauces; (2) cervical peri-adenitis present but slight; (3) nasal discharge scanty or absent; (4) fœtor present but not obvious at a distance; (5) moderate toxic symptoms.

**Group C** (slightly or non-toxic). (1) amount of membrane moderate, e.g., tonsils covered; (2) amount of membrane very small, e.g., specking of tonsils.

**Other Groups.** Laryngeal, Nasal, Septic and Bacteriological Diphtheria.

### Sub-Classification.

**Early Cases :—**Those admitted on or before the third day of disease.

**Late Cases :—**Those admitted after the third day of disease.

## GROUP A CASES.

Classification.	No. of Cases.	No. of Deaths.	Complications.								Treatment.		Average stay in Hospital.
			Post-Diph. Paralysis.								Average dose of Anti-toxin.		
			Heart (slight).	Heart (severe).	Diaphragm	Pharynx.	Palate.	Ocular.	Limbs.	Suppression of Urine.	Intra-venous.	Intra-muscular.	
											Units.	Units.	Days.
Group A (early)	6	-	3	-	1	1	2	3	6	-	100,000	45,000	75
Group A (late) (recovered cases)	4	-	2	-	-	-	2	2	4	-	100,000	40,000	75
Group A (late) (fatal cases)	8	8	-	1	-	-	-	-	-	1	150,000	20,000	3½

### Remarks on Group A Cases.

#### 1. Group A (early).

Severely toxic cases of diphtheria admitted on the third day of disease or earlier can generally be saved by anti-toxin. In our experience very large doses of anti-toxin are required, and the intra-venous route gives by far the best results.

The anti-toxin may be given either :—

- (a) partly intra-venously and partly intra-muscularly, or
  - (b) intra-venously only.
- (a) This is the method in more common use and is the one which we used exclusively for a time. It has, however, one considerable disadvantage. The intra-muscular portion is not fully absorbed in 12 hours' time, i.e., at the time when the case should be reviewed with the object of assessing the effect of the dose of anti-toxin employed, and of determining whether more is necessary. With this method, therefore, a practical difficulty often arises at this time in cases where the response to the anti-toxin is not fully satisfactory, viz., whether to wait for the full absorption of the intra-muscular serum, and so risk losing valuable time, or whether to give at once another very large dose of serum, which would entail considerable trouble and expense, perhaps unnecessarily. For this reason, and also because large doses of intra-muscular serum are painful, we have for some time tended to give the whole dose of anti-toxin intra-venously.
- (b) With the recent great improvements in concentration and refinement of serum it is quite practicable and indeed easy to

give doses of 100,000 to 150,000 units of anti-toxin intravenously at one time. This method, according to Madsen's\* view, secures an immediate massing of anti-toxins in the vicinity of the toxin-tissue cell combinations, which, in the early stages, appear to be loose and capable of being dissolved.

Whether this or some other view such as the "graded physical adsorption" theory suggested by Bordet offers the true explanation, it is at least certain that a striking clinical improvement can frequently be secured in these cases within 12 hours. The most noteworthy effects are the elimination of toxic symptoms and the limitation of the spreading edge of the membrane with dense opacity of the membrane at this point where formerly it was semi-transparent.

If these signs of clinical improvement do not occur within 12 hours of intra-venous injection of such doses, another large intra-venous dose is certainly indicated, unless by this time the case is utterly hopeless and practically moribund. In practice, a second dose is not commonly required after such huge doses as those mentioned above, but if smaller doses have been given in the first instance, a second dose may well be required. There are usually clear indications for this or the reverse, within 12 hours of the first injection if the serum has been given wholly intra-venously.

## **2. Group A (late).**

Severely toxic cases admitted after the third day of disease may or may not be saved by anti-toxin. Some are moribund on admission. In some the prognosis is well-nigh hopeless, e.g., cases which are hæmorrhagic on admission and others which are at so late a stage in the disease (second week or thereby) that fatal heart paralysis cannot be avoided.

If, however, such hopeless cases are excluded, there is a residuum in this group in which treatment by very large intra-venous doses of anti-toxin yields excellent though slow results. The acute stage passes off and though various forms of paralysis are certain to occur, they are rarely of the most serious and fatal type and eventual complete recovery takes place.

## **3. Incidence of post-diphtheritic paralysis.**

Severe forms of post-diphtheritic paralysis, except in cases coming under treatment at a hopelessly late stage, have been practically abolished by the use of large doses of intra-venous anti-

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\*Madsen, Th. The Harben Lecture, 1922. Journ. of State Med. XXXI, 1923.



toxin. Late heart failure, diaphragmatic and pharyngeal paralysis are now extreme rarities. On the other hand, the more harmless forms of paralysis, e.g., palatal, ocular and cardiac (extra-systoles) do still commonly occur in Group A and Group B cases. If late heart failure occurs in a case treated before the 5th day of the disease, it is generally a sure indication that the dose of anti-toxin administered has been inadequate.

#### 4. Period of residence in hospital.

With the virtual abolition of the serious forms of paralysis, the period of residence in hospital of recovered Group A cases can safely be reduced to about  $2\frac{1}{2}$  months (actually 75 days).

#### GROUP B CASES.

Classification.	No. of Cases.	Complications. Post-Diph. Paralysis.			Treatment. Average dose of Anti-toxin.		Average Period of Residence.	No. of Deaths.
		Palate.	Ocular.	Cardiac (slight).	Intra-venous.	Intra-muscular.		
Group B (early)	12	1	1	5	17,000 units	15,000 units	50 days	nil
Group B (late)	14	1	2	6	26,000 units	14,000 units	56 days	nil
Total	26	2	3	11	22,000	14,000	54 days	nil

#### GROUP C CASES.

Classification.	No. of Cases.	Complications.			Anti-toxin Dosage.	Deaths.
		Heart (extra-systoles)	Acute Suppve. Otitis Media.	Minor Skin Abrasions.		
C I. (moderate)	72				4,000 i.m.	nil
C II. (mild)	59	1	2	1	to 20,000 i.v.	
Total	131	1	2	1		nil

One of the ear cases had mastoiditis which necessitated an operation for draining the mastoid antrum. Both ears were dry at least 7 days on discharge from hospital.

#### Septic Diphtheria.

There were 13 cases of this type—a mixed infection with the diphtheria bacillus and various other organisms, sometimes a

streptococcus, but more often a putrefactive organism of the "Vincent" type. These may be treacherous cases, since the diphtheritic element may not be discovered in time for the case to be treated adequately with anti-toxin. Negative swabs in these cases are not to be trusted. There were two deaths in this group. Complications were few and unimportant, viz., one case each of post-diph. paralysis of palate, of eye muscles, and of heart (slight). These complications cleared up completely.

**Laryngeal Diphtheria** :—There were 14 cases with 3 deaths. In three cases tracheotomy was performed, with one recovery. There were no complications in the recovered cases.

**Nasal Diphtheria** :—There was only one pure case of nasal diphtheria. It was complicated by acute suppurative otitis media, which cleared up after the ears were ionised.

**Bacteriological Diphtheria** :—In 4 cases the throat swab was positive for the diphtheria bacillus, without clinical evidence of disease.

**Altered Diagnoses were as follows :—**

Acute Tonsillitis (clinical and Schick negative)	..	15
„ „ (clinical)	.. ..	8
Acute Rheumatism	.. ..	1
Vincent's Angina	.. ..	4
Septic Angina (Ludwig)	.. ..	1
Laryngismus Stridulus	.. ..	1
		—
		30
		—

**Double Infection on admission.**

Diphtheria and Scarlet Fever	.. ..	2
„ „ Whooping Cough	.. ..	1
„ „ Chickenpox	.. ..	1
„ „ Measles Pneumonia	.. ..	1

**Cross Infection of the Diphtheria Wards.**

A mild form of Scarlet Fever was introduced into these wards by the admission of the two cases noted above, and two of the diphtheria patients contracted scarlet fever as a result. This was the only instance of cross-infection, if we except mild tonsillitis, coryza and catarrh which spread round the wards on several occasions when the latter were overcrowded.

## Operations.

Tracheotomy	..	..	..	..	5
Tonsillectomy in virulent carriers	..	..	..	..	6
Abscess	..	..	..	..	1

## Virulence Tests.

There were twenty-six of these animal inoculation tests carried out to prove whether persons with positive throat swabs were infective or non-infective to others. Of these tests, ten were positive and sixteen negative for virulence. In six of the virulent cases tonsillectomy was performed. All these cases were ultimately discharged with negative swabs.

## Schick Test.

The Schick test was freely used in cases where there was doubt as to the diagnosis of diphtheria on admission. When this test is negative the diagnosis may be altered with confidence and the patient may often then be discharged after a few days' residence.

## Active Immunisation against Diphtheria.

When the Schick test was positive without clinical evidence of diphtheria, active immunisation with toxoid-anti-toxin was carried out.

When severely toxic cases of Diphtheria (Group A) were admitted, the parents in most instances were advised to have their other children immunised against the disease. Under this head 14 children were immunised during the year.

## ENTERIC FEVER.

There was only one verified case of Enteric Fever, a woman aged 33 years. She had a typical severe attack complicated by profuse hæmorrhage on the 22nd day of the disease and by a relapse commencing on the 45th day of disease. She made a complete recovery.

## MEASLES.

Fourteen cases of this disease were treated. Eight of these exhibited complications.

### Complications.

			Recovered. Died.		
Broncho-Pneumonia	..	3	.. 2	1	
Acute Bronchitis	..	1	.. 1	-	
Acute Suppurative Otitis Media		2	.. 2 (ears dry	-	
			7 days)		
Rhinorrhœa and septic sores	..	1	.. 1	-	
Suffocative Laryngitis	..	1	.. -	1	

The fatal case of pneumonia following measles was an infant aged 15 months, with definite signs of rickets.

The fatal laryngeal case was admitted with a diagnosis of diphtheria, but proved to have a typical measles rash on admission.

### WHOOPING COUGH.

Four cases were dealt with, all complicated by broncho-pneumonia. All four recovered.

### ERYSIPELAS.

Interesting results were obtained in the treatment of this disease. Following the method adopted last year, alternate cases on admission were treated by ultra-violet light and by erysipelas anti-toxin. Both methods yielded favourable results, the former presumably by stimulating the natural resistance to the disease locally, and the latter by providing immune bodies to neutralise the toxins. Since ultra-violet light is so simple and cheap and does not involve injection of foreign material, it soon became the method of choice. If applied with correct technique, i.e., one and a half to two erythema doses over the whole affected area and about three inches beyond, this method yields brilliant results.

Thirty-two cases were treated, 25 with ultra-violet light and 7 with anti-toxin. All made rapid recoveries. None of the cases progressed to the stage of "wandering erysipelas." Twelve of the ultra-violet light cases were over 40 years of age. The affected part in 30 cases was face, neck or scalp, in one case the arm, and in one case the leg. The two latter cases were children and the inflammation in these situations responded very rapidly to ultra-violet light.

The only complications were one abscess of the neck, and one case of otorrhœa, present on admission, and which dried up on application of zinc ionisation to the ears.

### CEREBRO-SPINAL FEVER.

This disease provided another interesting though small group of cases. There were seven cases, of which three recovered and four died.

#### Recovered Cases :—

- (1) Boy age 14 years from an industrial school.
- (2) Boy age 15 years from same industrial school.
- (3) Infant age 6½ months.

All three were definite cases of the disease with typical symptoms and with meningococci in the cerebro-spinal fluid.

### Fatal Cases :—

- (1) Very acute case fatal within 48 hours of admission.
- (2) " " " " "
- (3) Infant age  $2\frac{1}{2}$  months.
- (4) Infant age 3 months.

### PUERPERAL FEVER.

Seven cases sent in with this diagnosis were treated. Six recovered and one died.

### Recovered Cases :—

Puerperal Sapræmia .. .. .	2
Gonococcal Metritis and Phlebitis .. .. .	1
Suppurative Mastitis .. .. .	1
Septic incomplete Abortion .. .. .	2

**Fatal Case :—**Was one of puerperal septicæmia. She died suddenly a fortnight after admission from thrombosis which had spread from the uterus to the inferior vena cava.

The routine method of treatment for puerperal fever included glycerine drainage of the uterus.

### PNEUMONIA.

Four cases were treated, three being adults with acute influenzal pneumonia, all of whom recovered. The fourth case was a child aged 3 years suffering from acute broncho-pneumonia. He was in extremis on admission, and died within 12 hours.

### SMALLPOX.

Anstey Lane Hospital was closed as a smallpox hospital on June 5th and reopened as a children's sanatorium. Unfortunately smallpox again became prevalent in the city later, and the hospital was reopened for the reception of this disease on 27th November. Admissions numbered 274, and discharges 241, and there were also 34 smallpox contacts admitted for observation.

The cases, with very few exceptions, were extremely mild. Little if any nursing or medical treatment was required. A few cases had profuse rashes, but there was no secondary (septic) fever. All recovered and there was no permanent disability.

### OTHER INFECTIOUS DISEASES.

These included :—German measles, 2 cases ; chickenpox, 1 ; encephalitis lethargica, 1 ; complications of measles, 2 ; complications of whooping cough, 2 ; hemiplegia (admitted with diagnosis of encephalitis), 1 ; various other diseases, 11.



All recovered except (1) an infant aged 12 months with pulmonary tuberculosis, and (2) a case of gangrene of the leg (admitted with a diagnosis of erysipelas) in a woman aged 51 years.

### IONISATION IN OTITIS MEDIA.

In all forms of infectious disease, when middle ear suppuration occurred, zinc ionisation was carried out after a few days and repeated twice weekly until the ear was dry. For several years this has proved most successful treatment. During the year, all acute cases of otitis media, 11 in number, were discharged cured, that is, the perforation of the ear drum was healed and there had been no discharge for at least seven days. It was unnecessary to refer any of these cases to the School Clinic. Chronic Otorrhœa cases were also ionised, and even in these the discharge was dried up in every case. It was known, however, that in a few cases of long-standing otorrhœa the discharge recurred.

### TUBERCULOSIS.

Table E at the end of this report gives the classification of patients on admission to the sanatorium and hospital wards for tuberculosis, and also the immediate results of treatment at the time of their discharge.

The salient features of Table E are :—

#### (1) Further reduction in Group T.B. minus.

This group, consisting of patients in whose sputum the tubercle bacillus has not been found, was reduced very considerably as compared with former years, probably owing to more frequent and intensive sputum examinations. Excluding children, who have generally no sputum available for examination, the figures compared with previous years are as follows :—

Year.	GROUP T.B. MINUS.		Specimens of Sputum examined for T.B.
	Number of Adult Pulmonary Cases.	Percentage of all Adult Pulmonary Cases discharged.	
1927	187	55	332
1928	136	41	1168
1929	80	20.9	1536

The importance of accurate and painstaking sputum examinations in suspected pulmonary tuberculosis can hardly be exaggerated not only from the point of view of reliable statistics, but also from that of prognosis and treatment of the individual affected. In many cases, particularly "observation" cases in which the tubercle bacillus was found after prolonged search, special methods, e.g., the use of oil of mustard had to be employed to obtain a specimen of sputum.

## **(2) Immediate Result of Treatment—"Improved."**

The number of adult pulmonary cases classified as "improved" was 291 or 76 per cent. of all pulmonary cases discharged or died. No cases were classified as "quiescent" as it was felt that this expression could hardly be justified from one's observation of cases over the limited period of about four months in the sanatorium.

All the children were classified as "improved" except eight, of whom six had less than three months' treatment.

## **(3) Duration of Residential Treatment.**

The average duration of residence of all adult pulmonary cases discharged or died was 16 weeks, as compared with  $17\frac{1}{2}$  weeks last year.

The average for children was 22 weeks as compared with 10 weeks in 1928.

Of the 80 adults of the T.B. minus group 31 had treatment for less than three months and 31 for three to six months. Of the 102 adults in Class T.B. plus Group 1, 49 had treatment for less than three months and 51 for three to six months. These two groups represent "sanatorium cases" proper as distinct from advanced or "hospital cases." Grouping them together we find that 48 per cent. of such "sanatorium cases" had less than three months' treatment, 45 per cent. had three to six months' treatment, and only 7 per cent. had treatment for over six months.

It must be regarded as unsatisfactory that 48 per cent. of "sanatorium cases" had less than three months' treatment. There are doubtless many explanations which might be advanced, the chief perhaps being on the one hand that economic and social conditions did not permit of a longer stay, and on the other hand that bed accommodation in the sanatorium was short. It is, nevertheless, a clear indication that an undue proportion of patients as well as their friends entirely failed to grasp the nature of their disease and the prolonged treatment which is in most cases essential to secure its arrest.

When we come to advanced cases (Class T.B. plus, Group 2 and 3) we find that 78 or 41 per cent. of those discharged or died had less than three months, and 83 or 44 per cent. had three to six months' treatment or isolation. These figures seem to reveal a grave weakness in the tuberculosis scheme for it must be recognised that available accommodation is not sufficient to allow of more prolonged isolation of these cases. Most of them are unable to do any useful work and they spend their last days at home spreading mass infection in their households. We have here a vicious circle which must somehow be broken if tuberculosis in Leicester is to be materially reduced.

#### **(4) Non-Pulmonary Tuberculosis.**

In this department disease of the bones and joints was treated, particularly tuberculosis of spine, hip, knee and ankle.

Of the 20 cases discharged 15 were improved, and 5 showed no material improvement. Four of the latter for various reasons did not complete their treatment and were in residence only a few weeks. There were no deaths. Results were very good, although treatment was prolonged. The average period in hospital was  $76\frac{1}{2}$  weeks.

#### **(5) Observation for purpose of diagnosis.**

Forty cases were admitted for a week or more for observation so as to verify or exclude a diagnosis of pulmonary tuberculosis. Thirty-two were finally classified tuberculous, five non-tuberculous, and three doubtful. This provision is on sound lines and should be considerably extended.

In certain cases in which it was impossible to arrange a period of observation in the sanatorium, an X-ray photograph of the lungs was taken by arrangement with the Dispensary so as to assist in the diagnosis. 52 such X-ray films were taken of out-patients, chiefly doubtful pulmonary cases.

#### **(6) Pulmonary Tuberculosis in Children.**

It has been customary for a number of years, when smallpox was absent from the city, to keep the smallpox hospital at Austey Lane occupied with about 50 children who were admitted with a diagnosis of pulmonary tuberculosis, and had sanatorium treatment, as far as conditions allowed, for an average period of three or four months. During 1929 the smallpox epidemic interfered with this scheme and the children were treated as accommodation allowed in various wards of the Isolation Hospital. Accordingly a smaller number than usual were treated, viz., 90 cases.

This provided an opportunity for more intensive clinical investigation of these children. Various tests, e.g., X-ray, tuberculin, blood-sedimentation and faeces examination were undertaken in order to determine as far as possible the exact nature of the trouble from which they suffered. Since it is very rare to find T.B. in the sputum in children, opinion varies as to whether it is justifiable to attach the label of pulmonary tuberculosis to the subacute or chronic respiratory complaints for which these children were admitted. It is generally believed that such cases do not as a rule suffer from phthisis in adult life. If this is true, it follows that sanatorium treatment of these children, however beneficial it may be for the individuals concerned, is of little value in the prevention of adult pulmonary tuberculosis. There is no doubt, however, that the children benefit very greatly in general health from sanatorium treatment. Weight is generally increased and cough and catarrhal symptoms rapidly diminish.

In some cases the evening temperature remains elevated for many months. An attempt was made to deal with some of these cases by very prolonged rest in bed, and with others by a course of sanocrysin injections. Sanocrysin was given to 19 cases of whom seven did not complete the course owing to the development of skin rashes. The results of this sanocrysin treatment in children was disappointing. No greater improvement than that which might be ascribed to sanatorium regime was observed.

Owing to the investigation referred to the average period of treatment was increased to 22 weeks, as compared with 10 weeks last year.

### **The Sanatorium Treatment of Pulmonary Tuberculosis.**

In the last two annual reports attention was drawn to the importance of strict sanatorium routine in the cure of tuberculosis, particularly graded rest, graded work, and defined hours of recreation and sleep. It must be admitted that the true meaning and purpose of sanatorium treatment is still widely misunderstood not only amongst the public, but in the profession itself. There appears to be a prevalent idea that the purpose of a sanatorium is to provide patients with fresh air and good food ; that the discipline of sanatorium routine, though irksome and unnecessary for the individual, must be borne in order to facilitate administration ; and that a period of some 13 weeks of this treatment may effect such an improvement in health that patients may shortly thereafter resume the activities of normal life. Such a conception is not only utterly inadequate, but entirely misses the point. The primary idea of a



sanatorium is to provide not fresh air, but **rest in fresh air** ; to teach patients by practical example how to model their life so as to obtain adequate rest while working in moderation ; and finally to train them so that such a mode of life becomes a **habit** to be maintained as far as possible for such time as any active disease remains in the chest—a period which cannot be less than two or three years in any case of established tuberculosis. It is where these lessons have not been learned that sanatorium treatment so often fails. Patients are so easily lulled into a false sense of security by merely temporary improvement in health brought about by three months' rest.

It is, of course, impossible in most public sanatoria to keep patients until full healing is accomplished (except in tuberculosis of bones and joints, where crippling supplies the necessary incentive to prolonged treatment). It is, however, essential that patients and their friends should be prepared to make every effort to carry out sanatorium principles as far as possible in their homes for several years after discharge from the institution. It is a waste of time, effort and public money to give real earnest sanatorium treatment to those who are unable or unwilling to make this sacrifice.

If it is objected that in working-class households it is impossible to carry out these conditions, the reply is that in many cases it is actually being done. In an area such as Leicester where dire poverty is not widespread, much more could be done if the needs of the situation were generally recognised, and the maximum co-operation secured between the patient, his employer and his friends, so that the prolonged rest necessary in this disease might be obtained.

With this object in view lectures were given to groups of selected patients by the Medical Superintendent, and certain books were also recommended for detailed study, viz., " Overcoming Tuberculosis " by Drs. Webb and Ryder (Paul B. Hoeber), 10s. 6d. net, and " The T.B. Patient's Guide " by Dr. Frederick J. C. Blackmore (Cassell and Co.), 1s. 6d. net.

## **Special Treatment of Pulmonary Tuberculosis.**

### **(a) Artificial Pneumothorax.**

New cases induced .. .. .	2
Refills in these and old cases .. .. .	205
Replacement of pleural fluid by air .. .. .	31

This work was continued on the lines described in previous reports. The method gains in favour every year and although it takes up much time it gives great satisfaction both to patients and staff.



### (b) Sanocrysin.

New cases commenced	..	..	..	6
Second course commenced	..	..	..	5
Cases not receiving full course	..	..	..	3

This special method described last year was also continued for further trial. Results appeared to be very good in suitable cases. Certain cases, after trial, were found to be unsuitable owing to the development of rashes. In these cases the treatment was at once discontinued.

### Patients' Work Scheme.

As Rollier has stated, in the treatment of tuberculosis we should use not only the "rest cure" and the "sun cure," but also the "work cure." It is the aim in the sanatorium, after a preliminary period of complete rest in bed, to keep every patient at work in such a way and for such time as falls well within the limit of his strength. There is nothing more valuable than interesting occupation for making the discipline of sanatorium life tolerable. The work scheme has been explained in previous reports.

The staff employed is one welfare supervisor or instructor and two assistants. One of these is almost fully employed in making, with the help of patients, splints and appliances for surgical tuberculosis; the other works chiefly on the poultry farm and piggeries.

The work done by patients up "on grade" includes (in addition to light ward duties):—

- (1) Handicraft work, e.g., cane work trays, stools, chairs, &c., fancy leather work such as purses, pouchettes and handbags, artificial flowers and decorations made of paper, beads, suede or wool.
- (2) Assistance in the making of surgical splints and appliances.
- (3) Light gardening, such as keeping paths clean, &c.
- (4) Assistance in the poultry farm.
- (5) Assistance in the piggeries.

Bed patients are taught as far as possible to do the lighter forms of handicraft work while in bed, and for this purpose they buy their own material and arrange their own sales.

In the case of patients "on grade" doing handicraft work, the scheme is financially self-supporting so far, at least, as material is concerned. The "Gilroes Handicrafts Fund" makes all payments for materials and takes all receipts from articles sold.

The balance sheet of this fund as at 1st January, 1930, shows the following items :—

**“ Gilroes Handicrafts,” Year 1929.**

	Sales.			Profit.		
	£	s.	d.	£	s.	d.
Cane Work Section ..	92	14	3	5	12	7
Leather, &c., Work Section	197	4	11	19	18	5
	<hr/>			<hr/>		
Total	£289	19	2	£25	11	0
	<hr/>			<hr/>		

Cane work articles to the value of £20 9s. 0d. were presented to the Convalescent Home at Holt. The expenses included fees of £15 15s. 0d. for exhibiting goods at the Home Life Exhibition, Leicester, in September, 1929.

**Handicraft Work for Ex-Patients.**

Many ex-patients who are unable to do full-time work have profited by what they have learned in handicrafts at the sanatorium, and have been able to earn a few shillings weekly by making articles at home. Some of them return to the workshops in the sanatorium for further instruction after they leave the sanatorium. For this purpose there were 157 visits made by ex-patients to the workshops during the year.

**Seaside Convalescent Home for Pulmonary Tuberculosis.**

“ Home Place,” Holt, a splendidly built mansion standing in 17 acres of ground beautifully laid out with gardens, woodland and meadow and situated two miles from the sea, was opened in June, 1929, as a convalescent home for afebrile healing cases of pulmonary tuberculosis who had undergone a period of treatment in the city sanatorium. Twenty-two beds are provided in this institution, and they were occupied by women and children and by men for three-monthly periods alternately. The cases treated were : men, 25 ; women, 29 ; boys, 13 ; and girls, 8, and the period of treatment averaged about three months.

Some difficulty was encountered in finding sufficient men patients at a suitable stage of the disease to make up a full complement. A few cases of fairly advanced disease were, therefore, included in the number treated, although it was recognised that they were not fit for the normal regime of the home, which is equivalent to that of the full working grade in the sanatorium.

The great majority of the patients showed distinct immediate benefit from this treatment. Although they had gained considerable weight in the sanatorium, their weight was still further augmented by four or five pounds on an average after treatment at the home. There is no doubt that when suitable cases are chosen the change of scene, surroundings and routine has a stimulating and beneficial effect and, at the same time, a great advantage is secured in that the period of rest is prolonged.

### **“ Surgical ” Tuberculosis.**

Considerable progress was made during the year in the technique of splint and appliance making so as to secure better and more continuous immobilisation of joints. It is believed that these improvements are now preventing relapses in hip joint cases which formerly were of somewhat frequent occurrence. Further deformities resulting from faulty position of limbs and trunk during treatment are now being prevented.

**Out-Patients.**—When patients were discharged wearing splints or appliances, they attended at intervals as out-patients for general supervision, repair of appliances, &c. During the year 14 ex-patients were supervised and they made 43 attendances.

### **Operating Theatre.**

Operations performed were as follows :—

- |   |       |
|---|-------|
| (1) Major operations (Mr. R. S. Lawson, F.R.C.S.) | 6     |
| (2) Minor operations by the medical staff         | .. 24 |

The major operations were chiefly excisions of joints and amputations.

### **Ultra-Violet Light Department.**

Ultra-violet light baths, chiefly by means of carbon arc lamps, were given (except during summer months) to

- 18 cases of surgical tuberculosis,
- 17 cases of pulmonary tuberculosis in adults,
- 25 cases of pulmonary tuberculosis or chronic pulmonary catarrh in children.

The total number of treatments given was 1,852.

Where there are many different elements in treatment contributing to results, it is not easy to define the exact value of any

one of them. It is one's distinct impression, however, that ultra-violet light judiciously used is a valuable addition to the therapeutic armamentarium of a sanatorium. In tuberculosis ultra-violet light is not a specific cure as in rickets. It is a form of stimulation. Cases must, therefore, be chosen which are capable of responding favourably to stimulation, and dosage must be carefully regulated according to the capacity of the patient so to respond. This applies to all forms of tuberculosis, pulmonary as well as non-pulmonary.

In cases of pulmonary tuberculosis, great care must be exercised in selecting patients and prescribing dosage, but, if this is done, ultra-violet light may be used with confidence and with benefit. No ill-effects were noted in this series. In the case of only two adults and about half-a-dozen children it was considered wise to stop treatment temporarily owing to slight rises of temperature.

In non-pulmonary tuberculosis, the beneficial effects of light were again apparent in (a) keeping up muscle tone, and (b) producing a sense of well-being.

#### X-RAY DEPARTMENT.

Number of X-Ray films of lungs	..	..	462
„ „ „ other parts	..	..	85
Total number of X-Ray films of in-patients	..	..	499
„ „ „ „ out-patients	..	..	52
Screen examinations	..	..	numerous
Observation cases examined for tuberculosis	..	..	40
„ „ „ and classified as tuberculosis	..	..	32

The X-Ray apparatus has again proved to be indispensable in the diagnosis of pulmonary tuberculosis, particularly early cases ; in the control of artificial pneumothorax treatment ; and in the diagnosis and control of treatment of tuberculosis of bones and joints. As reported last year, the present apparatus has rendered good service, but is now out-of-date for chest work of the type which we require. An apparatus of much higher power is needed so that the time of exposure may be shortened. Only by this means can good definition be assured in photographs of moving parts like the lungs. For the diagnosis of early cases of pulmonary tuberculosis, any radiogram other than a first-class one is generally useless, and such radiograms can be made with certainty only by means of high-powered apparatus.

## HOSPITAL LABORATORY.

Total Number of Investigations, 4,153.

### BACTERIOLOGY AND PATHOLOGY.

Nature of Specimen.	Result.		
	Number.	Positive.	Negative.
Swabs for Diphtheria—			
(a) from Practitioners .. ..	647	119	528
(b) from Hospital Wards .. ..	1386	217	1168
Swabs for Vincent's Angina .. ..	11	9	2
Sputum for Tubercle Bacilli .. ..	1536	616	920
Fæces   "       "       " .. ..	3	2	1
Urine     "       "       " .. ..	4	1	3
Pleural Fluid   "       " .. ..	31	7	24
Cerebro-Spinal Fluid   " .. ..	2	—	2
Cerebro-Spinal Fluid for Meningococci	27	9	18
Vaginal Smears for Gonococcus .. ..	2	2	—
Blood for Widal's Test .. ..	15	2	13
Fæces for Typhoid .. ..	1	—	1
Urines examined microscopically ..	186	—	—

### HÆMATOLOGY.

Sedimentation Tests .. ..	136
Polynuclear Counts .. ..	104
Complete Blood Counts .. ..	3

### BIOCHEMISTRY.

Urea Concentration Tests .. ..	7
Blood Sugar Estimations .. ..	3

### ANIMAL EXPERIMENTS.

	Number.	Positive.	Negative.
Guinea Pig Tests for Tubercle Bacilli ..	6	4	2
Virulence Tests for Diphtheria ..	26	10	16
Post-Mortem Examinations .. ..			11

The total laboratory work done shows a slight increase as compared with the previous year. Since 1926 there has been an increase of one hundred and fifty eight per cent. in the number of specimens



examined in the laboratory. In the matter of sputum examinations for the tubercle bacillus, the number of specimens examined has increased by 31 per cent. over the figure for 1928. The result of this work is seen in the reduction of the adult pulmonary "T.B. minus" group from 41 per cent. to 20.9 per cent. of the cases discharged. **Animal inoculations** to the extent shown in the table were performed by the medical superintendent and senior assistant medical officer, who both hold the necessary licences from the Home Office. Guinea pigs were the animals solely employed. The results obtained both in Diphtheria and Tuberculosis were of great service in dealing with the problems raised.

### **STAFF ILLNESSES.**

The following staff were removed to the wards on account of illness :—

- (1) A nurse who contracted measles.
- (2) Two nurses with after-effects of an operation for appendicitis, thrombosis and sepsis respectively.
- (3) A nurse with pleurisy with effusion.
- (4) A nurse with acute rheumatism.

None of the staff contracted scarlet fever or diphtheria.

### **Schick Test and Immunisation against Diphtheria.**

The Schick Test was performed on 31 nurses. Of these, 14 were found to be positive and were immunised by three weekly injections of toxoid.

### **Medical Staff.**

The Junior Assistant Medical Officer, Dr. Sinclair R. Wilson, appointed in April, 1929, resigned in January, 1930, to take up an appointment as Senior Assistant Medical Officer to the Baguley Sanatorium, Manchester. Mr. James Howe Weir, M.B., Ch.B., B.Hy., D.P.H. (Durham), succeeded him as Junior Assistant.

### **Buildings and Equipment.**

Further alterations and improvements in buildings, equipment and grounds were made in addition to those detailed in the two last reports.

**Heating System :—**Additional radiators were put into Wards I. to V. Automatic heating control was installed in one ward (Ward III.) as an experiment. The heating surface in the cubicles

of the sanatorium block (Ward X.) was increased by additional piping so arranged as to keep clothing dry in the cubicle wardrobes. Small additional steam-heating units were supplied to the administrative block, and in various ward lavatories heating coils were put in to prevent freezing of the water system in winter. The loss of heat from steam pipes in the main duct was reduced by repairs to the covering of the pipes.

**Main Kitchen :**—An additional large steam-heated hot closet and plate, and an electric potato machine and accessories were provided.

**Lighting System :**—Ward V. and the Recreation Room were rewired and an entirely new system of lighting installed.

**Painting :**—External painting of Wards I. to VIII. and internal painting of Ward V. and the Recreation Room was done.

**Ward Furnishings :**—Built-in clothing cupboards or wardrobes for each patient were provided in the cubicles of the sanatorium block, and in the tuberculosis hospital blocks (Wards IV. and V.).

**Transport :**—A new Morris motor ambulance was provided.

**Poultry Farm :**—The old fowl houses and coops together with the old stock were sold off and a new start was made with poultry keeping on the intensive system. The available ground was penned out to accommodate 300 birds. Two modern poultry houses, 30 feet by 12 feet, each in three sections, were provided. New stock was obtained consisting of good laying strains of Rhode Island Reds and White Leghorns.

The egg production in November and December was particularly good and all the birds remained in good condition during the year.

Sanatorium patients assisted in the work of the poultry farm. In undertaking this venture, the Committee were grateful for the advice of the agricultural organisers to Leicestershire County Council—Mr. Thos. Hacking and Mr. Atkinson.

**New Laboratory, Dispensary, &c. :**—Plans were prepared for the erection of a new Laboratory and Dispensary and improvement of the Mortuary and Post-Mortem Room accommodation.

**Staff Cottages :**—The Engineer's house was enlarged and improved, and cottages were erected for the Welfare Supervisor and the second chauffeur.

**New Greenhouse** :—A large new greenhouse, 60 feet by 20 feet, with a row of cold frames on each side, was erected. This enabled great improvements to be made in the grounds by giving space for cultivation of abundant bedding plants, &c. It is hoped also that in the cultivation of tomatoes, &c., a good return will be obtained on the money invested in providing this house.

### **GROUND.**

The appearance of the grounds was still further improved by the provision of additional flower beds and rockeries, and by bringing further patches of rough grass under the lawn mower.

H. STANLEY BANKS.

23rd June, 1930.

**TABLE A.**  
**Number of Patients Admitted, Discharged and Died during 1929.**  
 (As verified after correction of diagnosis.)

DISEASE.	Remaining 31st December, 1928.	Admitted during Year.	Discharged during Year.	Died during Year.	Remaining 31st December, 1929.
Scarlet Fever ..	32	302	313	—	21
Diphtheria ..	31	232	207	13	43
Enteric Fever ..	—	1	1	—	—
Measles ..	—	14	12	2	—
Erysipelas ..	2	34	32	—	4
Cerebro-Spinal Fever	—	7	3	4	—
Polio-myelitis ..	—	—	—	—	—
Puerperal Fever ..	—	7	6	1	—
Other Diseases ..	5	53	45	11	2
Smallpox ..	23	274	241	—	56
Smallpox Contacts ..	5	34	39	—	—
Tuberculosis :—					
Observation Cases ..	3	40	39	—	4
Adults ..	100	374	333	43	98
Surgical ..	27	23	20	—	30
Children ..	16	114	90	—	40
Discharged Soldiers ..	1	8	5	1	3
	—147	—559	—487	—44	—175
Total ..	245	1517	1386	75	301

**TABLE B.**  
**Patient Days.**

				For 12 months ending Dec. 31st, 1929.	For 12 months ending March 31st, 1930.
Smallpox	..	..	..	3419	8287
Smallpox Contacts	..	..	..	465	276
Scarlet Fever	..	..	..	6808	6152
Diphtheria	..	..	..	8796	9473
Enteric Fever	..	..	..	78	92
Measles Erysipelas	..	..	..	335	352
Poliomyelitis	..	..	..	—	—
Other Infectious Diseases	..			1637	1874
Tuberculosis :—					
Adults	..	..	..	42195	41023
Discharged Soldiers			..	701	917
Children	..	..	..	13966	15326
Surgical Cases	..	..	..	10624	10647
Observation Cases	..	..	..	845	1030
				89869	95449

**SUMMARY.**

Infectious Diseases	..	..	21538	26506
Tuberculosis	..	..	68331	68943
Total	..	..	89869	95449



TABLE C.

City of Leicester.

## ISOLATION HOSPITAL AND SANATORIUM.

Income and Expenditure for the two years ending  
31st March, 1930.

EXPENDITURE.	Year 1928-29.			Year 1929-30.		
	£	s.	d.	£	s.	d.
Salaries and Wages .. .. .	11847	15	6	12155	16	1
Superannuation : Corporation's Contributions and Additional Allowances .. .. .	382	10	3	374	13	4
Provisions .. .. .	8292	7	0	8456	0	9
Drugs, Medical Appliances, &c. .. .. .	2417	0	0	1486	17	7
Fuel, Light and Water .. .. .	4346	7	7	4915	6	6
Furniture, Bedding and Linen .. .. .	1286	11	1	1423	10	11
Crockery and Hardware .. .. .	299	0	4	233	16	6
Uniforms and Dresses .. .. .	186	13	2	272	13	5
Cleaning Materials .. .. .	301	6	2	281	11	11
Laundry Materials .. .. .	92	8	8	215	18	10
Structural Renewals, Repairs and Painting (excluding wages) .. .. .	4216	7	0	3427	13	11
Grounds, &c. (excluding wages) .. .. .	417	9	3	387	1	2
Transport (excluding wages) .. .. .	742	4	2	839	16	6
Printing, Stationery, Postage and Telephone	186	14	0	201	2	5
Rates and Insurance .. .. .	1422	12	2	1545	0	3
Miscellaneous .. .. .	455	13	2	407	3	7
Sanatorium School—Salaries, &c. .. .. .	536	9	11	472	9	11
Occupational Treatment—Wages, Materials, &c. .. .. .	562	18	0	888	1	0
X-Ray and Light Treatment Supplies .. .. .	241	3	1	237	14	11
Total Expenditure .. .. .	38233	10	6	38222	9	6
Less Sale of Produce (including supplies from Garden, &c., to Institution) and Miscel- laneous Income .. .. .	1244	15	8	1305	19	1
Net Expenditure for Maintenance .. .. .	36988	14	10	36916	10	5
Net Expenditure per Patient Day .. .. .	0	7	7	0	7	9
Income for Maintenance .. .. .	121	15	1	122	2	0
*Net Cost (excluding Loan Charges) .. .. .	£36866	19	9	£36794	8	5
Number of Patient Days .. .. .	97,906			95,449		

\*One half of the approved cost of treatment of tuberculosis patients was borne by the Government.

ALFRED RILEY,

City Treasurer.

15th July, 1930.

**TABLE D.**

As required by the Ministry of Health.

**A.—Average Number of Beds Available for Patients during the Year 1929.**

	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total
		'Sanatorium' Beds	'Hospital' Beds	Disease of Bones and Joints	Other Conditions	
Adult Males ..	2	30	36	6	..	74
Adult Females ..	2	30	25	6	..	63
Children under 15	1	39	..	15	..	55
Total ..	5	99	61	27	..	192

**B.—Return showing the Extent of Residential Treatment during the Year 1929.**

			In Institu- tions on Jan. 1	Admitted during the year.	Dis- charged during the year.	Died in the Institu- tions.	In Institu- tions on Dec. 31
Number of Patients	Adults.	M.	47	209	166	24	66
		F.	68	185	184	20	49
	Child- ren.	M.	9	73	55	..	27
		F.	20	52	43	..	29
Number of Observa- tion Cases	Adults.	M.	2	22	21	..	3
		F.	1	16	16	..	1
	Child- ren.	M.	..	1	1	..	..
		F.	..	2	2	..	..
Total			147	560	488	44	175

**TABLE E.** As required by the Ministry of Health.  
**Results of Treatment.**

Classification on admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in the Institution.												TOTAL	
			Under 3 months.			3-6 months.			6-12 months.			More than 12 months.				
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Improved .. .. .	10	29	31	15	16	38	1	-	5	-	-	6	151	
		No material improvement..	3	5	6	-	1	2	-	-	-	-	-	-	17	
		Died in Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Class T.B. plus Group 1.	Improved .. .. .	20	29	-	21	30	2	6	4	-	-	-	-	112	
		No material improvement..	1	1	-	-	-	-	-	-	-	-	-	-	2	
		Died in Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Class T.B. plus Group 2.	Improved .. .. .	16	22	-	30	18	-	10	7	-	3	-	-	106	
		No material improvement..	4	2	-	3	3	-	1	1	-	-	-	-	14	
		Died in Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Class T.B. plus Group 3.	Improved .. .. .	-	1	-	1	2	-	-	-	-	-	-	-	4	
		No material improvement	-	8	2	9	1	-	-	1	-	-	1	-	22	
		Died in Institution..	13	10	-	10	6	-	1	4	-	-	-	-	44	
NON-PULMONARY TUBERCULOSIS.	Bones and Joints.	Improved .. .. .	-	-	-	-	2	1	1	-	2	1	2	1	10	
		No material improvement..	1	2	1	-	-	-	-	-	-	-	-	-	4	
		Died in Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Abdominal.	Improved .. .. .	-	1	-	1	-	-	-	-	-	-	-	1	3	
		No material improvement..	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Died in Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Other Organs	Improved .. .. .	-	-	-	-	-	1	-	-	1	-	-	-	2	
		No material improvement..	-	-	-	-	-	-	-	1	-	-	-	-	1	
		Died in Institution..	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Peripheral Glands.	Quiescent or Arrested ..	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Improved .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	
		No material improvement..	-	-	-	-	-	-	-	-	-	-	-	-	-	
Died in Institution..		-	-	-	-	-	-	-	-	-	-	-	-	-		
Observation for purpose of diagnosis.			Under 1 week.			1-2 weeks.			2-4 weeks.			More than 4 weeks.				
	Tuberculous..	..	..	14	5	-	3	-	1	-	3	-	3	3	-	32
	Non-tuberculous	..	..	1	1	-	-	-	1	-	-	-	-	1	1	5
	Doubtful	..	..	-	-	-	-	-	-	-	1	-	-	2	-	3



### APPENDIX III.

## Report of the City Analyst

For the Year 1929.

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In presenting my first Annual Report to the Chairman and Members of the Health Committee, I would like to place on record my gratitude to my predecessor, Mr. S. F. Burford, F.I.C., for his kindly help and advice during the four years I assisted him, and for the benefit I derived from his wide experience which he placed unstintingly at my disposal.

The total number of samples examined during the year was 1,699, made up as follows :—

Sale of Food and Drugs Act	..	..	1,172
Milks for Bacteriological Examination	..		256
Isolation Hospital Milks	..	..	24
Rainwaters	..	..	36
Waters for Chemical Analysis	..	..	81
Waters for Bacteriological Analysis	..	..	60
Rag Flock Act	..	..	6
Miscellaneous samples from various departments			64
			<hr/> 1,699 <hr/>

The chief work of the department consists in the examination of Food and Drug samples submitted by the Sanitary Inspectors. The samples are considered mainly from the Public Health aspect, i.e., they are examined for compliance with existing legal standards, and tested for injurious preservatives, metals and non-nutritive extraneous matter. Drugs are analysed to see whether they have been correctly dispensed so that they contain the full proportion of the potent ingredients, and to make sure that they have not deteriorated in stock.

Full analyses therefore are not necessarily made. These would be of interest, but would take up time which can be better spent on more essential work.

Occasionally, e.g., to compute the amount of preservative allowed in compound articles, a full analysis has to be made.



The various samples examined are classified and set out in Tables A, B and C.

Milk being a primary article of food, and the one most prone to sophistication, gets most attention. Table D shows the number of samples examined and the number found faulty.

In all, 60 samples were not passed. Of these, 30 samples (16 formal and 14 informal) were deficient of fat, 24 samples (8 formal and 16 informal) were deficient of non-fatty solids, 3 samples (2 formal and 1 informal) were deficient in both respects, 2 samples (both formal) contained formalin preservative, and one sample (formal) was described as "new milk" but had been boiled.

Two of the formal samples deficient of fat had been completely skimmed.

The supply as a whole was fairly clean and shows an improvement on previous years.

The average composition of all samples (including those deficient), month by month, is given in Table E :—

TABLE E.			
Month.	No. of Samples.	Fat.	Solids not Fat.
January .. ..	54	3.73	8.90
February .. ..	15	3.53	8.76
March .. ..	34	4.01	8.79
April .. ..	56	3.81	8.81
May .. ..	109	3.515	8.63
June .. ..	59	3.53	8.76
July .. ..	70	3.70	8.76
August .. ..	32	3.805	8.705
September .. ..	65	3.83	8.75
October .. ..	58	3.97	8.80
November .. ..	69	3.735	8.86
December .. ..	70	3.75	8.88

It will be seen from these figures that a sample must fall short of the average by a considerable margin before it comes below the legal minimum composition of 3.0 per cent. of fat, and 8.50 per cent. of non-fatty solids.

An occasional low quality milk may be the product of a single cow, and still genuine though abnormal. That, of course, is small satisfaction to the consumer, and he will still be entitled to the opinion that bad dairying from his point of view is as great an offence as wilful watering or skimming.

The results of the Bacteriological examinations of milk samples taken under the Milk (Special Designations) Order, 1923, are set out in Table F.

96 per cent. of the samples of Certified Milk were passed as satisfactory.

75 per cent. of the samples of Grade "A" (T.T.) were passed as satisfactory.

82 per cent. of the samples of Grade "A" were passed as satisfactory.

A reference to the superior keeping qualities of certified milk is made below in connection with cream samples.

The various samples of Foods and Drugs examined were on the whole very satisfactory. The defective samples and the nature of the offences are tabulated in Table G. It will be seen that the offences consist largely in the use of forbidden preservatives, or the use of an excessive amount of permitted preservative.

The employment of formalin as a milk preservative is a practice that was thought to have died out long ago, yet on two different occasions milk samples from the same man were found to contain this objectionable article.

Some trouble was taken investigating possible avenues by which the formalin might have got into the milk accidentally, but without success. Considering the nature of the offence, the vendor was lucky to escape conviction; particularly as the dealer and the farmer each blamed the other and neither disputed the presence of the formalin.

Boric acid was detected in three samples of cream. It should by now be well known in the trade that added boric acid is definitely prohibited in all articles of food. These faulty samples apparently came from Ireland during a time of shortage locally.

Probably more resistance was offered to the 1925 Preservative Regulations in respect of the article cream than in respect of any other article of food; and one year's grace was obtained on behalf of the cream industry before the provisions of the Act became operative.

Thus, previous to 1st January, 1928, cream containing not less than 35 per cent. of milk fat was permitted to contain up to 0.4 per cent. of boric acid if sold and labelled as preserved cream and advertised to be unfit for infants and invalids. Since the above date, no preservative is permitted to be added to cream.

The difficulties appear to have been largely exaggerated and after two years' full working of the Regulations, there is still a cream industry.

The problem of avoiding losses through souring would appear to be solved by

- (a) Clean conditions for the production of the milk in the first instance ;
- (b) Strict attention to cleanliness during the separation of the cream ;
- (c) Extended use of refrigerators for storing the cream between production and consumption.

Cream from certified milk produced under ideal conditions, and having a low bacterial count has been found to " keep " for a longer period than cream from ordinary bottled milk having a much higher count. The accompanying chart is self-explanatory, and shows that the certified cream took 72 hours to reach the degree of acidity reached by the ordinary sample in 32 hours.

The only other sample of interest taken to Court was a sample of raisins. An informal sample contained 793 parts per million of sulphur dioxide and a " following-up " formal sample contained 1,120 parts per million, whereas by the Regulations only 750 parts per million of sulphur dioxide are allowed in raisins. The vendor successfully pleaded a warranty defence. The warrantors stated that they had immediately withdrawn the goods as soon as the defect was known, and no further action was taken against them.

Suggestions are received from the Committee from time to time concerning new articles to examine. These suggestions are very welcome. Fresh lines of food continually come on to the market and new practices in manufacture arise ; and it is very desirable that as many points of view as possible of those interested should be brought to bear upon the problem of a pure food supply.

The other work of the department will be briefly referred to.

### **Water Analyses.**

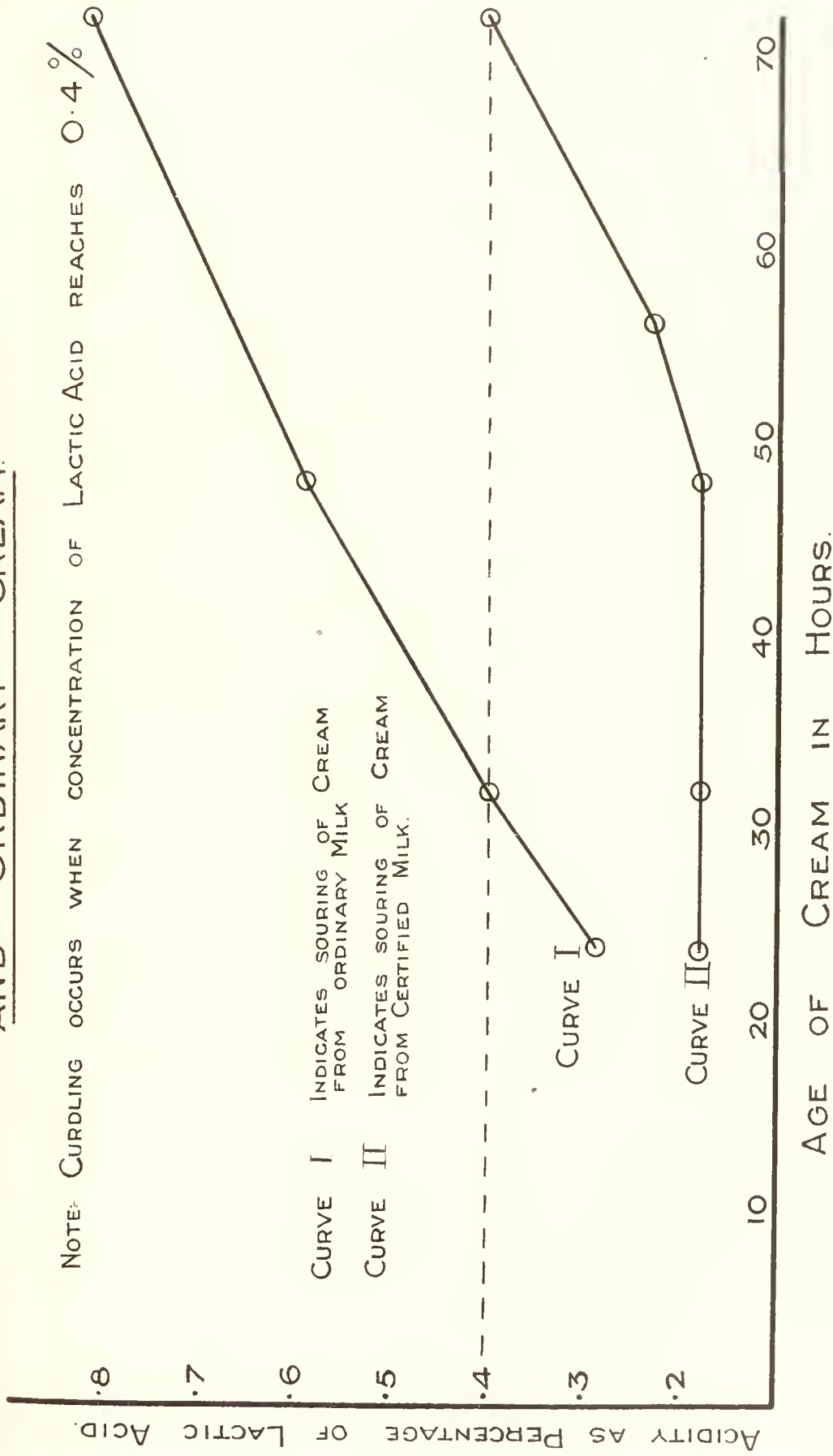
Fifty-nine samples were examined chemically and 57 bacteriologically for the Water Department.

The year was an anxious one as regards water supply owing to the prolonged dry weather. Fresh wells were sunk and samples examined so that a reserve supply should be ready in case of need. Fortunately the rain came before the situation became too serious. It is interesting to note that when the reservoirs were at their lowest, the quality of the water was excellent owing to natural purification during a period of quiet storage.

### **Atmospheric Pollution.**

The three rain gauges at the Town Hall, Milton Street and Western Park respectively continue to provide interesting results,

# COMPARISON OF RATES OF SOURING OF CERTIFIED CREAM AND ORDINARY CREAM.







howbeit much work to the department. A short report is now written quarterly in which an attempt is made to read some meaning into the figures obtained. It is hoped that these prove of interest to many of the Committee. Statistics, charts, &c., are available in the Analyst's Office.

Briefly, the year's figures establish the result that town air is at its best in summer, while country air is at its best in winter.

### **Rag Flock Act, 1911.**

The Act requires that the soluble chlorine in Rag Flock, as determined in a definite manner, shall not exceed 30 parts per 100,000.

Six samples of wool flock were examined during the year under this Act, and all proved satisfactory.

### **Fertilisers and Feeding Stuffs Act.**

No official samples were taken under this Act. A number of samples were sent in privately by the Refuse Disposal Department.

### **Miscellaneous Samples.**

These included oils from the City Surveyor's Department, waters and sweeping compounds from the Education Department, disinfectants from the Markets Committee, flash point determinations for the Fire Brigade, and dried milks, flue dusts, &c., for the Health Committee. One pathological specimen was received from the Royal Infirmary under special circumstances and was examined by the authority of the Chairman.

The present organisation of the Laboratory seems to be a very satisfactory one. I have pleasure in acknowledging the good work done by Mr. J. G. Lunt, B.Sc., A.I.C., and Mr. J. L. Pinder, both of whom take a very keen interest in the work. We have now become a smoothly working team, which I hope will maintain the tradition for good work always associated with the office of Public Analyst in Leicester.

**TABLE A.**

**Samples Analysed under the Food and Drugs Acts during 1929.**

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Milks (Chemical) ..	104	224	167	197	692
Milks (Bacteriological) ..	48	63	77	68	256
Miscellaneous Foods ..	38	100	80	109	327
Miscellaneous Drugs ..	37	35	19	62	153
Totals .. ..	227	422	343	436	1428

**TABLE B.**  
**Foods Analysed in 1929.**

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Tea .. ..	..	..	..	12	12
Cocoa .. ..	2	6	..	..	8
Coffee .. ..	5	..	6	..	11
Mineral Waters .. ..	6	..	..	..	6
Brandy .. ..	..	2	..	2	4
Gin .. ..	..	2	..	3	5
Rum .. ..	..	1	..	1	2
Whiskey .. ..	..	8	..	3	11
Beer .. ..	..	6	..	7	13
Butter .. ..	14	6	6	..	26
Lard .. ..	3	12	6	6	27
Margarine .. ..	1	13	6	..	20
Dripping .. ..	1	..	..	6	7
Cream .. ..	..	6	17	6	29
Cheese .. ..	..	6	..	..	6
Rice .. ..	..	..	3	12	15
Ground Rice .. ..	..	..	1	..	1
Sago .. ..	..	..	2	..	2
Tapioca .. ..	..	..	1	..	1
Bread .. ..	..	..	6	6	12
Sponge Cakes .. ..	..	6	..	..	6
Condensed Milk .. ..	..	12	..	..	12
Honey .. ..	6	..	..	..	6
Mustard .. ..	..	1	..	..	1
Pepper .. ..	..	1	..	6	7
Sausage .. ..	..	6	11	..	17
Meat Paste .. ..	..	..	4	..	4
Tinned Fish .. ..	..	4	..	..	4
Tinned Fruit .. ..	..	..	4	..	4
Custard Powder .. ..	..	..	1	..	1
Orangeade Powder .. ..	..	..	1	..	1
Sweets .. ..	..	..	5	..	5
Mixed Spice .. ..	..	1	..	..	1
Raisins .. ..	..	..	..	7	7
Sultanas .. ..	..	..	..	5	5
Currants .. ..	..	..	..	3	6
Wines .. ..	..	..	..	3	3
Mincemeat .. ..	..	..	..	6	6
Bacon .. ..	..	..	..	6	6
Non-Alcholic Wines .. ..	..	..	..	6	6
Nutmeg .. ..	..	1	..	..	1
	38	100	80	109	327

**TABLE C.**  
**Drugs Analysed in 1929.**

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Glycerine .. ..	12	..	..	12	24
Aspirin .. ..	7	..	..	..	7
Phenacetin .. ..	6	..	..	..	6
Zinc Ointment .. ..	6	..	..	..	6
White Precipitate Oint.	6	..	..	..	6
Dispensed Medicines ..	..	6	..	..	6
Tartaric Acid .. ..	..	12	..	..	12
Epsom Salts .. ..	..	12	12	..	24
Ground Ginger .. ..	..	1	..	6	7
Sugar of Milk .. ..	..	4	..	..	4
Tincture of Iodine .. ..	..	..	..	6	6
Seidlitz Powder .. ..	..	..	..	6	6
Magnesia .. ..	..	..	..	6	6
Gregory Powder .. ..	..	..	..	4	4
Camphorated Oil .. ..	..	..	..	12	12
Paregoric .. ..	..	..	..	7	7
Ammoniated Tincture of Quinine .. ..	..	..	..	3	3
Hydrogen Peroxide .. ..	..	..	7	..	7
	37	35	19	62	153

**TABLE D.**  
**Milk Samples taken during 1929.**

Month.	Formal.	Informal.	Adulterated.	
			Formal.	Informal.
January ..	27	28	1	1
February ..	2	13	Nil	1
March ..	18	16	1	1
April ..	38	18	2	3
May ..	91	18	7	Nil
June ..	15	44	2	9
July ..	38	32	3	6
August ..	13	19	3	1
September ..	38	27	2	5
October ..	36	22	1	1
November ..	41	28	4	2
December ..	42	28	3	1
	399	293	29	31
	Total 692		Total 60	

**TABLE F.**  
**Result of Bacteriological Examinations**  
Milk (Special Designations) Order, 1923.

Grade.	Total No. examined.	Passed as satis- factory.	Total count too high.	B. Coli too numerous.
Certified .. ..	27	26	1	0
Grade A (T.T.) .. ..	67	50	8	16
Grade A .. ..	132	108	15	21
Pasteurised .. ..	—	—	—	—
New Milk .. ..	35	24	2	10
Sterilised Milk .. ..	7	5	2	0
Total .. ..	268	213	28	47

**Milk and Cream Regulations**  
(Return required by Ministry of Health).

	No. of Samples examined for presence of Preservative.	No. in which Preservative was reported to be present.
Milk .. .. .	692	2
Cream .. .. .	29	3

---

Milk No. 566 ..	Contained Formaldehyde.	6 parts per million.
„ „ 579 ..	„ „	7 „ „
Cream No. 602 ..	Contained Boric Acid ..	.12 per cent.
„ „ 690 ..	„ „	.08 „
„ „ 608 ..	„ „	.006 „

Four of the samples of cream were tinned cream, the average amount of butter fat being 24.4 per cent.

The amount of fat in the fresh creams ranged from 36.2 per cent. to 58.4 per cent., the average being 51.6 per cent.

**TABLE G.**  
**Adulterated Samples other than Milk.**

No.	Description.	Formal or Informal.	Nature of Adulteration.	Remarks.
761	Sausage	Informal	Contained 306 parts per million of sulphur dioxide .. ..	Caution by M.O.H.
763	Sausage	do.	Contained 172 parts per million of sulphur dioxide .. ..	do.
602	Cream ..	do.	Contained 0.12 per cent. boric acid ..	do.
690	do.	do.	Contained 0.08 per cent. boric acid ..	do.
608	do.	do.	Contained 0.006 per cent. boric acid ..	do.
902	Margarine	do.	Contained 16.44 per cent. moisture ..	Following up sample genuine.
229	Beer ..	do.	Contained 329 grains per gallon of salt ..	Following up formal sample genuine.
233	Magnesia	do.	Contained 6.0 per cent. sulphate .. ..	Caution by M.O.H.
548	Raisins	do.	Contained 793 parts per million sulphur dioxide .. ..	Following up sample taken (see No. 595).
595	do.	Formal	Contained 1,120 parts per million sulphur dioxide .. ..	Warranty defence successfully pleaded. Promise to withdraw remainder of stock.

### LABELLING OFFENCES.

643. Margarine. Informal.
572. Hydrogen Peroxide. 20 volume strength supplied but not declared.
575. Do. 20 volume strength supplied but not declared.
230. Magnesia. Magnesium carbonate supplied labelled H. Mag.
231. Do. Magnesia supplied labelled Carb. Magnes. Heavy.
234. Do. Magnesium carbonate supplied labelled H.M.
236. Do. Magnesium carbonate supplied labelled Magnesia.





# REPORT OF CHIEF SANITARY INSPECTOR.

## Staff.

The Inspection Staff consists of a Chief Inspector, two Meat Inspectors whose whole time is occupied at the Corporation Slaughterhouses at the Cattle Market, and fourteen District Sanitary Inspectors, including one additional Inspector—R. T. Blaylock, of Carlisle—who was appointed in June, 1929.

The new Merchandise Marks Act, the Agricultural Produce (Grading and Marking) Act, and the very large number of Orders in Council made thereunder, dealing mainly with the sale of fruit, eggs, poultry, flour, &c, have added considerably to the duties of your Inspectors. We find it peculiarly difficult to prove contraventions of these enactments.

During the winter session, 1928-29, a laboratory course in "Bacteriology of Meat Inspection" was arranged for Sanitary Inspectors at the Leicester College of Technology. The course is being continued next winter and, I hope, for several more years.

## Synopsis of Sanitary Inspection Work.

An "inspection" is the first visit made to premises.

A "re-inspection" is a visit made after notice has been given for the remedying of a defect.

			Inspections.	Re-inspections.	Total.
<i>Re</i> Accumulations	..	..	127	30	157
<i>Re</i> Animals, Poultry, Swine, &c.			27	—	27
Ashpits and Ashbins	..	..	165	110	275
Bakehouses—Factory	..	..	137	—	137
Non-Factory	..	..	112	—	112
Canal Boats	..	..	53	—	53
Closets—Water	..	..	697	214	911
Pails	..	..	106	—	106
Common Lodging Houses—Day	..	..	409	—	409
Night	..	..	20	—	20
Complaints Received	..	..	2465	3107	5572
Complaints Confirmed	..	..	2217	6852	9069
Cowsheds	..	..	49	—	49

	Inspections.	Re-inspections.	Total.
Dairies, Milkshops and Milkstores ..	545	—	545
Dangerous Structures .. ..	24	2	26
Drains Inspected—Smoke Tests ..	4975	451	5426
Chemical Tests ..	16	32	48
Colour Tests ..	56	—	56
Drains Inspected .. ..	7324	5892	13216
Factories .. ..	85	4	89
Fish Frying Premises .. ..	121	—	121
Food Manufacturing Premises ..	193	—	193
Houses <i>re</i> Contagious Disease ..	917	—	917
Houses <i>re</i> Contagious Disease			
Enquiry .. ..	820	—	820
Houses <i>re</i> Disinfection .. ..	240	—	240
Housing Acts—Houses .. ..	849	9089	9938
Hotel and Restaurant Kitchens ..	27	—	27
Ice-cream Premises .. ..	73	—	73
Meetings with Owners or Tradesmen	4168	—	4168
Miscellaneous .. ..	7	—	7
Offensive Trade Premises ..	190	—	190
Piggeries .. ..	16	—	16
Shops—Meat .. ..	2290	—	2290
Fish .. ..	155	—	155
Fruit .. ..	81	—	81
Other Food .. ..	144	—	144
Schools .. ..	6	—	6
Slaughterhouses (not including			
Cattle Market group) ..	7818	—	7818
Smoke Observations .. ..	396	—	396
Special Interviews with Stokers, &c.	228	—	228
Special Visits .. ..	4544	—	4544
Sewers, &c. .. ..	21	—	21
Streets or Back Roads .. ..	5	—	5
Tips .. ..	17	—	17
Urinals—Public .. ..	55	—	55
Private .. ..	42	—	42
Van Dwellings .. ..	299	—	299
Wells .. ..	6	—	6
Workshops and Workplaces (ex-			
cluding Bakehouses) ..	284	—	284
Yards and Courts .. ..	302	105	407
Grand Totals .. ..	43923	25888	69811

Notices—Served	—Informal	..	..	..	2090
	—Formal	..	..	..	205
Complied with—	Informal	..	..	..	1443
	—Formal	..	..	..	163
Samples—Food and Drugs Acts		..	..	..	1552
Water	..	..	..	..	25
Bacteriological	..	..	..	..	376
Milk for T.B.	..	..	..	..	120

### CANAL BOATS.

The whole of the “available” boats on the register, viz., 51, are “Narrow” boats. 53 boats were inspected during the year; these were occupied by 64 males, 39 females, 9 children over 5 years and 11 under 5 years.

Contraventions were as follows :—

Cabins—defective sides, and roofs	..	8
“ “ floor	..	1

These defects were remedied without legal proceedings.

One new “Narrow” boat was registered.

### DAIRIES AND COWSHEDS.

In dealing with applications for registration as purveyors of milk from persons with Dairies and Cowshed premises outside the city area, I am gradually establishing a satisfactory working arrangement with Sanitary Inspectors in those adjacent districts where the applicants reside. I communicate with the local Sanitary Inspector, and unless he is prepared to say the applicant has satisfactory premises and other arrangements, sterilising, bottling, &c., the person is not registered. Many of our colleagues in the rural districts are only too glad to co-operate with us, as withholding registration assists them in getting Dairy and Cowshed premises improved. Much more good could be done in the way of joint visits in the rural districts were it not for transport difficulties.

In the city area more and more milk is being sold in bottles and this gets over many of the storage difficulties that small shopkeepers experience.

### DISINFECTION.

The total number of articles of clothing, bedding, &c., disinfected by steam during the year was 2,500. The number of houses or parts of houses disinfected was 1,678.

### DRAINS.

#### Voluntary Cleansing of Stopped Drains by Health Department.

122 drains were attended to, and of these, 75 were unstopped immediately. In the remaining 47 cases the owners' attention had to be called to them.

# ADMINISTRATION OF FACTORY AND WORKSHOPS ACT, 1901.

In connection with Factories, Workshops, Workplaces and  
Home Work.

## 1.—Inspection of Factories, Workshops and Workplaces.

Premises.  (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories .. ..	89	4	—
Workshops .. ..	284	4	—
Total .. ..	373	8	—

## 2.—Defects found in Factories, Workshops and Workplaces.

Particulars.  (1)	Number of Defects		Number of Prosecutions. (4)
	Found. (2)	Remedied. (3)	
Nuisances under the Public Health Act :—			
Want of Cleanliness ..	3	3	—
Want of Ventilation ..	1	1	—
Overcrowding .. ..	—	—	—
Other Nuisances ..	1	1	—
Sanitary Accommodation Insufficient .. ..	3	2	—
Offences under the Factory and Workshops Act ..	—	—	—
Total .. ..	8	7	—

## 3.—Home Work.

The number of lists received from employers was as follows :—

	Twice in the year.		Once in the year.	
	Lists.	Outworkers.	Lists.	Outworkers.
Wearing Apparel (making) ..	26	389	60	559



#### 4.—Other Matters.

##### CLASS (1).

Matters notified to H.M. Inspector of Factories :—

Failure to affix Abstract of the Factory and Workshops Acts  
(S. 133, 1901) .. .. . None

Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Acts (S. 5, 1901)	}	Notified by H.M. Inspector	15
Reports (of action taken) sent to H.M. Inspector		15	

Underground Bakehouses (S. 101) in use at the end of the year 1

#### Improvements to Houses.

	No. of Houses.
Separate internal water supply in place of taps in common yards .. .. .	297
Additional water closets .. .. .	132

#### FOOD SUPPLIES—Supervision of.

In the early part of the year the local enquiry about the slaughtering arrangements in the existing private slaughterhouses and the public abattoir which the Corporation proposes to erect so that the former may be abolished, was held by an Inspector from the department of the Minister of Health.

The services of the additional Sanitary Inspector appointed in June were utilised to augment the staff responsible for the inspection of meat at the Cattle Market slaughterhouses, and the use of these centrally situated slaughterhouses still tends to increase, and to decrease correspondingly at the scattered private slaughterhouses.

TABLE A.

			Tons.	Cwts.	Qrs.	Lbs.
Meat .. .. .	..	..	68	3	2	21
Fish .. .. .	..	..	21	9	3	7
Fruit .. .. .	..	..	3	2	0	10
Vegetables .. .. .	..	..	44	3	2	6
Rabbits .. .. .	..	..	..	..	..	1216
Preserved Foods (Tinned Goods)	..	..	..	..	..	8953
Poultry .. .. .	..	..	..	..	..	273
Eggs .. .. .	..	..	..	..	..	2990
Hares .. .. .	..	..	..	..	..	18

# MEAT.

TABLE B.

Total weights of British and Imported Meat and Offal rejected, at various premises.

		Tons.		Cwts.		Qrs.		Lbs.									
British Meat		..	59	10	3	15											
Imported Meat		..	-	8	3	21											
British Offal		..	7	17	1	1											
Imported Offal		..	-	6	2	12											
Total Weight		..	68	3	2	21											
		British Meat.				Imported Meat.				British Offal.				Imported Offal.			
		Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.
Shops	..	-	1	0	14	-	-	-	-	-	-	2	4	-	-	-	-
Private Slaughterhouses		8	14	0	16	-	-	-	-	1	9	1	20	-	-	-	-
Cattle Market	"	48	8	0	9	-	-	-	-	6	5	1	11	-	-	-	-
Corporation Cold Stores		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail Market	..	-	5	2	21	-	4	1	21	-	-	2	8	-	-	1	22
Wholesale Market (Imported)	..	-	-	-	-	-	4	2	-	-	-	-	-	-	6	0	18
Railway Stations	..	2	1	3	11	-	-	-	-	-	1	1	14	-	-	-	-
Totals	..	59	10	3	15	-	8	3	21	7	17	1	1	-	6	2	12

TABLE C.

Total weights of Carcases, Parts of Carcases, and Offal, rejected for all diseases.

	Carcase.				Parts of Carcase.				Offal.				Total.		
	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.
Tuberculosis ..	18	13	1	1	5	9	1	11	2	10	2	20	26	13	1
Other defined Diseases	33	0	3	5	2	16	1	19	5	13	0	21	41	10	1
Total ..	51	14	0	6	8	5	3	2	8	3	3	13	68	3	2
															21

TABLE D.

Total number of Carcases found affected, for various diseases.

Carcases affected with Tuberculosis.	Carcases affected with other defined diseases.		Total number of Carcases affected. (All diseases.)	
945	966		1911	

Number of healthy Carcases examined not available.

TABLE E.

Number of Carcases showing evidence of Tuberculosis and number of entire Carcases rejected.

	Beasts.	Calves.	Pigs.	Total.
Number of Carcases affected ..	223	1	722	945
Number of entire Carcases rejected	75	1	40	116

**TABLE F.**  
Total number of Carcases rejected for Tuberculosis and other defined diseases.

Disease.	Bulls.	Cows.	Heifers.	Bullocks.	Calves.	Sheep.	Lambs.	Pigs.	Total of all Carcases.
Tuberculosis ..	1	57	12	5	1	-	-	40	116
Other defined diseases ..	-	84	4	16	32	194	24	85	439
Totals ..	1	141	16	21	33	194	24	125	555

**TABLE G.**  
Total number of all Carcases, parts of Carcases, and Offal, rejected for all diseases.

Disease.	Carcases.	Parts of Carcase.	Offals of Carcase.	Total number affected.
Tuberculosis ..	116	685	144	945
Other defined diseases ..	439	99	428	966
Totals ..	555	784	572	1911

**TABLE H.**  
Total number of Carcases, parts of Carcases and Offal condemned in :—

	Carcases	Parts of Carcase.	Offals of Carcase.	Total number affected.
Corporation Slaughterhouses (including Co-operative Society Slaughterhouse at Cattle Market) ..	417	686	436	1539
Private Slaughterhouses ..	92	70	109	271
Shops, Markets and other Premises ..	46	28	27	101
Totals ..	555	784	572	1911

TABLE I.

Tabulated List of other defined Diseases and their incidence in Carcases rejected.

Disease.	Cows.	Heifers.	Bullocks.	Calves.	Sheep.	Lambs.	Pigs.	Total.
Dropsy ..	35	2	3	2	100	12	4	158
Fever—Acute ..	7	—	1	7	25	1	6	47
Poisoning ..	1	—	1	—	—	—	—	2
Lymphadenitis ..	—	—	—	—	—	—	1	1
Pneumonia ..	3	—	—	2	5	2	5	17
Decomposition ..	—	—	—	1	6	2	4	13
Emaciation ..	4	—	—	—	10	2	3	19
Asphyxia ..	—	—	—	—	16	1	26	43
Dead Animals ..	1	1	1	1	16	—	16	36
Immaturity ..	—	—	—	12	—	3	—	15
Bruising—Extensive ..	5	1	3	1	8	1	—	19
Gangrene ..	2	—	—	—	2	—	—	4
Septic Metritis ..	1	—	—	—	—	—	1	2
Septicæmia ..	2	—	1	—	1	—	4	8
Pyæmia ..	—	—	—	3	2	—	—	5
Mammitis ..	4	—	—	—	—	—	—	4
Johnnes' Disease ..	17	—	6	—	—	—	—	23
Jaundice ..	1	—	—	1	—	—	8	10
Swine Erysipelas ..	—	—	—	—	—	—	7	7
Anæmia ..	1	—	—	—	3	—	—	4
Black Leg ..	—	—	—	2	—	—	—	2
Total ..	84	4	16	32	194	24	85	439

## SAMPLING.

### Food and Drugs (Adulteration) Act.

#### NUMBER OF SAMPLES TAKEN FOR CHEMICAL ANALYSIS.

1925	1926	1927	1928	1929
532	686	847	927	1552

### Milk (Special Designations) Order, 1923.

#### NUMBER OF SAMPLES TAKEN FOR BACTERIOLOGICAL EXAMINATION.

1925	1926	1927	1928	1929
65	185	308	330	376

### MILK AND DAIRIES (CONSOLIDATION) ACT, 1915.

(This Act came into operation on 1st September, 1925.)

Number of samples of milk taken for microscopical and biological examination for Tubercle Bacilli—

1926	1927	1928	1929
73	120	120	120

	Number of Samples taken.	Number reported containing Tubercle Bacilli.	Number reported Negative.	Number unsatisfactory although Negative as regards Tubercle Bacilli.
Cowkeepers with registered premises within City boundaries ..	10	1	9	—
Cowkeepers with premises outside City boundaries ..	110	8	99	3
Totals ..	120	9	108	3

Percentage of milks containing Tubercle Bacilli, 7.5.



## City Herds.

The cow from which the milk containing Tubercle Bacilli was obtained was dealt with in the early part of 1930, under the Tuberculosis Order, and will be mentioned in the Annual Report for 1930.

## County Herds.

Of the 110 samples of milk produced outside the city, the 8 which were reported to contain Tubercle Bacilli were referred to the County Authority for action, and in due course reports were received from them of action taken under the Milk and Dairies (Consolidation) Act, 1915.

The three other unsatisfactory reports were also referred to the County Authority under another section of the Act. These reports on the post-mortem examination of the inoculated guinea pigs are as follows :—

- (1) Guinea pig succumbed to an acute infection by some organism, other than tubercle, contained in the milk.
- (2) Large numbers of B. Coli, Streptococci and pus present.
- (3) Large numbers of Streptococci and pus present.

## SLAUGHTERHOUSES.

During the year one Registered Private Slaughterhouse was removed from the Register, reducing the number to 42. No compensation was paid in respect of it.

One Private Slaughterhouse was granted an annual licence.

One Knacker's Yard was granted an annual licence.

### Particulars of all Slaughterhouses in the City.

Registered Private Slaughterhouses	..	..	42
Licensed Private Slaughterhouses (includes one Knacker's Yard)	..	..	2
Corporation Slaughterhouses situated at Cattle Market and let off as Private Slaughterhouses	..	..	18
			—
Total Slaughterhouses	..		62
			—

## SMOKE ABATEMENT.

Action taken *re* smoke nuisances :—

Observations taken of chimney stacks ..	..	39
Chimneys reported for causing nuisance ..	..	9
Cautions by Inspectors .. ..	..	3
Interviews of Engineers or Stokers by Inspectors ..	..	3
Informal Notices or Letters sent .. ..	..	7
Chimneys reported to Health Committee ..	..	9
Prosecutions .. .. .	..	3

## POLICE COURT PROCEEDINGS.

### Public Health Acts.

For the abatement of nuisances .. ..	..	7
Contravention of Slaughterhouse Bye-Laws ..	..	2
Public Health (Meat) Regulations, 1924 ..	..	
Food and Drugs (Adulteration) Act .. ..	..	3
Milk and Dairies Order, 1926 .. ..	..	..
Housing Act, 1925 .. .. .	..	..
Leicester Improvement Drainage and Markets Act, 1868 .. .. .	..	..

POLICE COURT PROCEEDINGS.

Acts, Byelaws or Regulations under which proceedings were instituted.	Default or Offence.	Result.	Fines. £ s. d.	Costs. £ s. d.
Leicester Improvement Drainage and Markets Act, 1868.	Excessive smoke emitted from factory chimney.	Conviction	1 0 0	—
Ditto	Ditto	Case adjourned for one month. Withdrawn on payment of costs.	—	10 0
Ditto	Ditto	Case adjourned for one month. Further adjourned for a fortnight and three weeks respectively. Firm fined .. Stoker „ ..	1 0 0 5 0	— —
Public Health Acts, 1875-1925	Failure to comply with notice to abate a nuisance caused by van dwellers.	Order of Court to clear the land within 28 days and prohibit re-occupation for 12 months.	—	—
Public Health Acts, Leicester Corporation Acts.	Failure to comply with notice to abate nuisance arising from defective drains.	Case adjourned for one week and then withdrawn.	—	—
Carried forward ..			2 5 0	10 0

# POLICE COURT PROCEEDINGS—Continued.

Acts, Bye-laws or Regulations under which proceedings were instituted.	Default or Offence	Result.	Fines.		Costs.	
			£	s. d.	£	s. d.
Public Health Acts, Leicester Corporation Acts.	Failure to comply with notice to abate nuisance arising from defective drains.	Brought forward ... Case adjourned for two weeks. Case withdrawn on payment of cost of opening drain and Court costs	2	5 0	10	0
					4	3 6
					5	0
Ditto	Failure to comply with notices to abate nuisances arising from defective drains.	Case adjourned for one week and one month respectively. Case dismissed on payment of costs.			5	0
Bye-laws respecting Slaughtering	Slaughtering beast without previous stunning with a mechanically operated instrument.	Case dismissed				
Ditto	Ditto	Case against firm dismissed.				
		Slaughterman fined...	5	0 0		
Public Health (Meat) Regulations, 1924 (Part 5).	Exposing meat and failing to prevent contamination by dust.	Firm fined ... Servant case dismissed	1	0 0		
Food and Drugs (Adulteration) Act.	Selling a sample of milk containing dirty sediment : 3 parts of dry dirt per 100,000 parts.	Conviction	5	0 0		
Carried forward ..			13	5 0	5	3 6

POLICE COURT PROCEEDINGS—Continued.

Acts, Byelaws or Regulations under which proceedings were instituted.	Default or Offence.	Result	Fines.		Costs	
			£	s. d.	£	s. d.
Food and Drugs (Adulteration) Act.	Selling two samples of milk 10 and 18 per cent. deficient in fat.	Brought forward .. Conviction in first case, and second case dismissed.	13	5 0	5	3 6
Ditto	Selling two samples of milk 4 per cent. and 20 per cent. deficient in fat.	Conviction in both cases	2	0 0	—	—
Ditto	Selling milk containing 6 and 7 parts per million of formaldehyde.	Cases dismissed	2	0 0	—	—
Ditto	Selling raisins containing 1,120 parts per million sulphate.	Retailer relied on warranty. Wholesaler summoned, stocks withdrawn from sale; case dismissed.	—	—	—	—
Milk and Dairies Order, 1926.	Filling bottles with milk on public highway.	Case dismissed on defence that milk put into bottle was not for sale.	—	—	—	—
Leicester Improvement Drainage and Markets Act, 1868.	Allowing premises to be occupied after being condemned as unfit for human habitation.	Conviction	2	0 0	5	0
Housing Act, 1925	.. Failing to inscribe owner's name and address in rent book.	Conviction	2	0 0	—	—
F. G. McHUGH, M.R.San.I., M.S.I.A., <i>Chief Sanitary Inspector.</i>			21	15 0	5	8 6





## Reports of the V.D. Medical Officers.

### 1.—Report on the MALE V.D. Clinic.

By H. J. BLAKESLEY, F.R.C.S. (Eng.).

I beg to report on the work of the Male Venereal Clinic at the Royal Infirmary, under your control and that of the Ministry of Health, for the year ending December 31st, 1929.

During this period 652 patients presented themselves for diagnosis and treatment.

By clinical examination 228 were apparently suffering from syphilis and 424 from gonorrhœa. Of these, 12 patients were proved to be suffering from both acute gonorrhœa and syphilis. 158, after repeated clinical and pathological examinations, were found to be non-venereal; 92 having been suspected of suffering from gonorrhœa and 66 from syphilis.

497 were City patients; 155 were County patients.

17,170 attendances were made by patients on the books; of these 4,408 received treatment for syphilis, 12,281 for gonorrhœa. 14,214 were City patients, and 2,956 County patients. 6,383 of these attendances were at times other than when the clinic was in session, for irrigations and other intermediate treatment. 5,895 attendances were by City patients and 488 by County patients.

In every case treated the blood and discharges were submitted for pathological and bacteriological tests for the purpose of diagnosis, aid to treatment, evidence of progress, and proof of recovery. The cerebro-spinal fluid in some cases of neurosyphilis was submitted to Wasserman or other tests.

To patients suffering from syphilis, 2,083 intravenous or intramuscular injections of Salvarsan substitutes and 815 muscular injections of mercurial cream were administered, 2,171 for City patients and 727 for County patients.

To patients suffering from gonorrhœa, 11,589 intraurethral irrigations, anterior and posterior, were given, and instrumentation, instillation, vaccines, prostatic and urethral massage were practised as necessary treatment in a large percentage of these cases.

### In-Patients.

82 patients were admitted to the wards, 58 being City and 24 being County patients ; 20 were highly infectious ; 13 cases acute epididymitis ; 5 on admission and 8 arose in course of treatment ; 8 gonorrhœal rheumatism and 5 acute prostatitis. No case of gonorrhœal ophthalmia arose. 2 cases of chronic syphilis were admitted, suffering from disease of spinal cord and heart. 3 cases of jaundice were admitted, and one case of arsenical dermatitis. 47 operations were performed under anæsthesia. No death occurred during the year.

### Results.

The number of patients who ceased attendance before completing the first course of treatment were :—

Syphilis ..	..	..	..	21
Gonorrhœa ..	..	..	..	50

Who ceased attendance after completing one or more courses, before completion of treatment necessary :—

Syphilis ..	..	..	..	25
Gonorrhœa ..	..	..	..	32

Who ceased attendance after completion of treatment, but failed to submit themselves to final tests :—

Syphilis ..	..	..	..	28
Gonorrhœa ..	..	..	..	59

Transferred to other clinics :—

Syphilis ..	..	..	..	19
Gonorrhœa ..	..	..	..	31

Transferred from other clinics :—

Syphilis ..	..	..	..	13
Gonorrhœa ..	..	..	..	21

Those who completed treatment and submitted themselves to repeated tests, and were clinically and pathologically proved to be cured :—

Syphilis ..	..	..	..	30
Gonorrhœa ..	..	..	..	176

The patients described as cured are submitted to exhaustive tests, in accord with the Rules laid down by the Ministry of Health.

### Points of Material Interest.

The new patients presenting themselves for treatment show an increase of 73 over those of last year.

**Special Note.**—A serious outbreak of virulent syphilis occurred during the year—there being 82 cases in the primary stage, as compared with an average of about 15 for the past three years. This outbreak in most instances was accompanied by a virulent form of actively infective organisms in addition to the *spirochaeta pallida*.

It is highly satisfactory to note that an increase of those suspecting themselves should have come to the clinic to find that they are free from evidences of either of these diseases.

Every effort has been made to persuade and encourage patients to persist in their attendances for treatment until all symptoms have disappeared and the necessary tests have been made to prove their cure complete.

Dr. Millard, the City Medical Officer of Health, has paid four official visits of inspection during the year. Dr. Fairer, one such visit. Colonel Harrison and Dr. Seymour, the Government Inspectors from the Ministry of Health, conducted an inspection of the clinics and wards on the 24th April.

The Board of Governors of the Royal Infirmary have afforded me every assistance and facility for the efficient working of the clinic, and the new In-Patient Department for Venereal Diseases is of great assistance in the general treatment of the In-Patients and those requiring intermediate attention.

My thanks are due to my Medical and Lay helpers for their zealous and loyal support in the conduct of the Clinic.

HENRY J. BLAKESLEY, F.R.C.S., Eng.,

Medical Officer in Charge.

24th February, 1930.

## 2.—Report on Female V.D. Clinic for Year 1929.

By BESSIE W. SYMINGTON, M.D., B.S. (Lond.).

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The total number of patients seen for the first time was 362, viz. :—

- 111 suffering from syphilis ;
- 171 „ „ gonorrhœa ;
- 80 showing no signs of venereal disease.

Under the last category are included all cases examined as contacts :—

- (a) Children of infected mothers.
- (b) Mothers of infected children.
- (c) Wives of infected husbands.
- (d) Babies of mothers treated during pregnancy.
- (e) Sisters and brothers of congenital syphilitics, especially those with affection of the eyes.

The number of City patients examined for the first time was 248, viz. :—

- 80 suffering from syphilis ;
- 126 „ „ gonorrhœa ;
- 42 showing no signs of venereal disease.

Acute early infectious cases of syphilis have numbered 12.

Acute cases of gonorrhœa have numbered 134.

### Out-Patients.

The total number of attendances of all patients was 9,697. 7,012 were seen by the Medical Officers at the Clinics, and 2,685 attended at other times for prescribed treatment.

The total attendances of City patients numbered 7,236. Of these 2,609 attendances for syphilis and 4,498 were for gonorrhœa. 129 attendances were made by patients not suffering from venereal disease.

### Syphilis.

Treatment has been given to each patient by various methods, and the drugs used were those found to be useful to each one.

The drugs used were arsenic, bismuth, potassium iodide and mercury.

Arsenic is given chiefly by intravenous injection in the form of Neokharsivan and Stabilarsan, or by the intra-muscular method in the form of Sulfarsenol.

Bismuth is given by the intra-muscular method, and this drug is used when the eyes are affected, in conjunction with arsenic or when arsenic is not tolerated.

The number of injections given at all Clinics, male and female—City and County—was 4,806, and of these 1,153 were given to female patients from the City.

Mercury and potassium iodide have been given by mouth. Mercury has also been given in certain cases by injection or inunction.

### **Gonorrhœa.**

During 1929 the number of cases has decreased. Treatment carried out has been :—

- (1) **Local**—by disinfection of vagina, cervix and urethra, by
  - (a) Dressings, tampons, douches, or pessaries ;
  - (b) Irrigation of the bladder, whenever the urethra is specially infected ;
  - (c) Instillation of glycerine into the body of the womb.

(2) **General**.—Treatment for anæmia caused by the disease is always given ; alkalies are given in acute cases, and vaccines are prescribed in special cases.

### **In-Patients.**

165 cases were admitted during the year. Amongst the cases treated were :—

21 cases of salpingitis, owing to serious extension of gonorrhœa.

10 cases of abscess of Bartholine's gland opened under anæsthesia due to acute gonorrhœa.

4 cases of gonorrhœal rheumatism of many weeks standing.

5 cases admitted for daily instillation of glycerine to avert abdominal operation.

8 cases of vulvo-vaginitis in little girls. These were given long and continuous treatment.

4 cases for dilatation and curettage to complete the cure of gonorrhœa. All these have done well.

2 cases for intra-spinal injections for chronic neuro-syphilis.

In the single ward 22 confinements have taken place and in no case has the child shown signs of infection.

The total number of in-patient days of treatment has been 2,578. Of these 461 were in-patients suffering from syphilis; 1,836 were suffering from gonorrhœa, and 281 were not suffering from venereal disease. (These were babies in the Maternity Ward.) 1,731 of these patient days related to City cases.

The number of cases discharged after completion of treatment has been 160. 17 cases were transferred for continuation of treatment to other Clinics.

An official inspection of the Female Clinic was made in May by Colonel Harrison and Dr. Seymour, and as a result of this Dr. Newton Davies was appointed to work for two hours at each Clinic, commencing in August.

BESSIE W. SYMINGTON,  
Medical Officer of Female V.D. Clinic.



### 3.—Report on Work for Venereal Diseases at St. Mary's Home, 1 Ashleigh Road, for Treatment of City Patients, 1929.

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The cases suffering from Venereal Disease treated at St. Mary's Home are young unmarried girls who are considered unsuitable for treatment at the Royal Infirmary Clinics, or those who require a longer course of treatment than can be given in the Infirmary Ward.

The Hostel contains 9 beds, with cots for babies when needed. The Maternity Ward contains 4 beds and is nearly always full.

The Out-Patient Clinic is held on Thursday evenings and the Hostel girls are seen usually on Monday mornings, also on Thursday evenings if necessary.

Daily work is carried out by the Sister-in-Charge as prescribed.

From the City the number of cases dealt with has been as follows :—

New cases admitted to the Hostel—8 girls and 2 babies. Of these 2 were suffering from syphilis, 5 from gonorrhœa, and 1 from syphilis and gonorrhœa.

This number is less than half of those admitted in 1928, as the acute infectious cases have been admitted to the Ward at the Royal Infirmary and afterwards dealt with as Out-Patients.

The number of days of residence for In-Patients has been 396 and 99 for babies.

10 cases were discharged from the Hostel and are continuing their treatment at the Clinic.

#### **Out-Patients.**

21 new cases have been admitted to the Clinic.

1,518 attendances have been made. Of these 1,012 were seen by the Medical Officer, and 506 were seen by the Sister-in-Charge.

133 injections have been given for syphilis ; 69 to In-Patients and 64 to Out-Patients.

Discharged cases have been followed up as far as possible, and the babies seen by the Sister-in-Charge. If they leave the City some suitable person is asked to watch them.

BESSIE W. SYMINGTON, M.D., B.S. (Lond.).



APPENDIX VI.

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STATISTICAL TABLES.



**TABLE 1.**  
**MUNICIPAL WARDS. VITAL STATISTICS, 1929.**

WARD. (1)	No. of Inhabited Tenements, July, 1929. (2)	Estimated Population, July, 1929. (3)	No. of Persons per Tenement, Census, 1921. (4)	Births (corrected). (5)	Deaths. (6)	Deaths under 1 year. (7)
1. St. Martin's	..	2,074	4.02	24	26	1
2. Newton	..	8,748	4.15	130	125	22
3. St. Margaret's	..	12,880	4.19	185	204	25
4. Wyggeston	..	14,899	4.34	400	291	45
5. Latimer	..	18,137	4.64	190	253	31
6. Charnwood	..	8,196	4.18	103	124	9
7. Wycliffe	..	10,744	4.00	98	198	10
8. De Montfort	..	7,242	4.35	87	102	8
9. The Castle	..	13,347	4.22	204	228	17
10. Westcotes	..	27,309	4.05	307	304	15
11. The Abbey	..	24,622	4.61	286	276	16
12. Belgrave	..	20,130	4.33	322	253	19
13. West Humberstone	..	24,223	4.68	367	285	28
14. Spinney Hill	..	30,666	4.22	398	336	22
15. Knighton	..	20,169	3.89	186	184	4
16. Aylestone	..	24,158	4.68	409	228	29

TABLE 2.

## MUNICIPAL WARDS. VITAL STATISTICS, 1929

WARD.	Birth-rate.	Death-rate.	Infant Mortality	Zymotic rate.	Phthisis rate.	Average Phthisis Rate, Years 1912-21.	Average Phthisis Rate, Years 1922-29.
1. St. Martin's ..	11.5	12.5	41	1.44	0.48	1.34	1.15
2. Newton ..	14.8	14.2	169	1.25	1.02	1.77	1.49
3. St. Margaret's ..	14.3	15.8	135	1.47	1.70	1.87	1.52
4. Wyggeston ..	26.8	19.5	112	1.81	2.08	1.77	2.14
5. Latimer ..	10.4	13.9	163	1.76	1.37	1.55	1.42
6. Charnwood ..	12.5	15.1	87	1.46	0.85	1.46	1.20
7. Wycliffe ..	9.1	18.4	102	1.39	0.74	1.19	0.94
8. De Montfort ..	12.0	14.0	91	1.10	0.55	0.76	0.67
9. The Castle ..	15.2	17.0	83	1.27	1.12	1.11	1.42
10. Westcotes ..	11.2	11.1	48	1.06	1.02	0.99	0.97
11. The Abbey ..	11.6	11.2	55	1.50	0.97	1.22	1.09
12. Belgrave ..	15.9	12.5	59	1.34	0.64	1.11	0.95
13. West Humberstone ..	15.1	11.7	76	0.86	0.90	1.52	1.07
14. Spinney Hill ..	12.9	10.9	55	0.94	0.84	0.92	0.90
15. Knighton ..	9.2	9.1	21	0.84	0.39	0.60	0.63
16. Aylestone ..	16.9	9.4	70	0.66	0.95	0.87	0.88



TABLE 3.  
Deaths in each Ward, classified for Age and Cause, 1929.

WARD.	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	0 to 1 year.	1 to 5.	5 to 60.	Over 60 years.	Total all ages.	Influenza.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Typhoid Fever.	Other Zymotics.	Total.	Diarrhoea.	Phthisis.	Respiratory Diseases.	Developmental Disease.	Cancer.	Total.
1. St. Martin's ..	1	3	8	14	26	1	..	..	2	..	..	..	3	..	1	5	14	3	26
2. Newton ..	22	8	30	65	125	3	..	..	5	1	..	2	11	7	9	20	67	11	125
3. St. Margaret's ..	25	17	71	91	204	11	1	..	5	1	..	..	19	2	22	35	101	25	204
4. Wyggeston ..	45	37	83	126	291	8	3	..	16	..	..	..	27	6	31	82	126	19	291
5. Latimer ..	31	15	90	117	253	20	2	1	8	..	..	1	32	4	25	49	116	27	253
6. Charnwood ..	9	6	44	65	124	10	2	..	..	..	..	..	12	..	7	28	67	10	124
7. Wycliffe ..	10	6	39	143	198	12	..	..	..	1	..	2	15	2	8	28	128	17	198
8. De Montfort ..	8	3	27	64	102	6	..	..	..	..	..	2	8	..	4	16	62	12	102
9. The Castle ..	17	5	75	131	228	12	2	..	1	..	..	2	17	1	15	52	118	25	228
10. Westcotes ..	15	6	94	189	304	25	..	1	2	1	..	..	29	..	28	39	181	27	304
11. The Abbey ..	16	8	107	145	276	30	..	..	2	2	..	3	37	1	24	47	139	28	276
12. Belgrave ..	19	13	81	140	253	17	1	..	5	1	..	3	27	..	13	47	143	23	253
13. West Humberstone ..	28	13	110	134	285	13	3	..	3	1	..	1	21	3	22	62	147	30	285
14. Spinney Hill ..	22	6	135	173	336	22	1	..	3	1	..	2	29	..	26	51	181	49	336
15. Knighton ..	4	2	54	124	184	15	..	..	..	..	..	2	17	..	8	35	94	30	184
16. Aylestone ..	29	16	92	91	228	8	2	..	2	3	..	1	16	1	23	40	127	21	228
Infirmary ..	55	37	212	87	391	7	..	..	1	..	..	8	16	9	5	56	264	41	391
Poor Law Infirmary ..	40	33	138	398	609	8	2	..	10	..	..	4	24	5	45	79	406	50	609
City Mental ..	..	..	20	25	45	..	..	..	..	..	..	..	..	..	4	13	25	3	45
Isolation Hospital ..	1	8	61	..	70	..	3	1	..	11	..	3	18	..	46	2	4	..	70

Deaths in Institutions have been subtracted from the Wards in which the Institutions are situated; and (except in the case of the Workhouse and Mental Hosp.) have been distributed to the Wards to which they belong. Deaths of persons transferred from the Workhouse to the Poor Law Infirmary, however, have not been distributed, as the home addresses of such persons are not obtainable.

**TABLE 4.**  
(As required by Ministry of Health).

## TUBERCULOSIS.

### NOTIFICATIONS ON FORM A.

#### No. of Primary Notifications.

Age Periods.	Pulmonary.		Non-Pulmonary.	
	Males.	Females.	Males.	Females.
0—1 .. ..	—	—	2	1
1—5 .. ..	8	10	7	4
5—10 .. ..	46	46	10	10
10—15 .. ..	19	20	3	3
15—20 .. ..	19	38	3	—
20—25 .. ..	37	57	1	3
25—35 .. ..	56	69	6	3
35—45 .. ..	55	30	1	2
45—55 .. ..	52	20	3	—
55—65 .. ..	24	11	—	—
65 and upwards ..	5	6	—	1
Total Primary Notifications .. ..	321	307	36	27
Total Notifications on Form A. .. ..	372	346	46	31

#### NOTIFICATIONS ON FORM B.

Under 5 .. ..	—	—	—	—
5—10 .. ..	—	1	1	1
10—15 .. ..	1	1	—	—
Total Primary Notifications .. ..	1	2	1	1
Total Notifications on Form B. .. ..	1	2	1	1

#### NUMBER OF NOTIFICATIONS ON FORM C.

Poor Law Institutions	6	—	—	—
Sanatoria .. ..	36	15	—	—
	(268)	(234)	(14)	(9)

The total number of fresh cases notified during 1929 on Forms A. and B., excluding cases previously notified, was:—

Pulmonary .. ..	657
Non-Pulmonary .. ..	77
Total .. ..	734

TABLE 4a.

## TUBERCULOSIS CASES.

## Supplemental Return.

Age Periods.			Pulmonary.		Non-Pulmonary.	
			Males.	Females	Males.	Females.
0—1	..	..	2	..	3	2
1—5	..	..	..	1	8	3
5—10	..	..	3	..	2	3
10—15	..	..	..	2	..	1
15—20	..	..	1	1	2	2
20—25	..	..	2	4	1	4
25—35	..	..	2	8	1	2
35—45	..	..	3	3	..	..
45—55	..	..	1	3	1	1
55—65	..	..	3	..	..	..
65 and upwards	..	..	2	..	..	..
Total Cases	..	..	19	22	18	20

TABLE 5.—Showing Number of Deaths from Tubercular Diseases in Leicester in past years.

Year	Phthisis.		Other Tuberculous Diseases.		Total Tuberculous Deaths.	
	Deaths.	Rate per 100,000 Population.	Deaths.	Rate per 100,000 Population.	Deaths.	Rate per 100,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
*1903	266	123	111	51	377	175
1904	353	163	96	44	449	207
1905	288	132	87	40	375	171
1906	339	154	71	32	410	187
1907	275	124	99	44	374	169
1908	287	128	104	46	391	175
1909	290	129	82	36	372	166
1910	281	124	77	34	358	158
1911	288	126	66	28	354	155
1912	284	123	89	38	373	162
1913	301	130	82	35	383	165
1914	273	117	88	37	361	155
1915	325	143	76	33	401	177
1916	306	135	67	29	373	165
1917	343	157	78	35	421	193
1918	316	145	82	37	398	182
1919	264	111	62	26	326	138
†1920	255	107	72	30	327	138
1921	278	116	73	30	351	147
1922	294	123	67	28	361	151
1923	285	118	36	15	321	133
1924	287	118	62	25	349	143
1925	305	125	59	24	364	150
1926	282	116	43	17	325	134
1927	283	115	63	26	346	141
1928	265	107	42	17	307	124
1929	266	108	53	21	319	130

\* The rates for the years 1903-10 have been revised in the light of the 1911 Census.

† The rate for the year 1920 has been revised in the light of the 1921 Census.

TABLE 6.

## Age and Sex Distribution of Deaths from Phthisis in 1929.

Age Period.			Males.	Females.	Total.
0—1	..	..	2	..	2
1—5	..	..	1	4	5
5—20	..	..	6	15	21
20—40	..	..	46	71	117
40—60	..	..	71	29	100
60—80	..	..	17	4	21
Over 80	..	..	..	..	..
All ages			143	123	266

## Occupations of Persons Dying from Phthisis in 1929.

SHOE TRADE :							
		M.	F.			M.	F.
Finishers	..	4	..	Army Pensioners	..	4	..
Clickers	..	6	..	Boxmakers	..	1	1
Rivettters	..	1	..	Porters	..	2	..
Pressmen	..	3	..	Licensed Victuallers	..	1	..
Machinists	..	4	3	Shop Assistants	..	1	1
Various	..	17	4	Warehousemen	..	5	..
				Various	..	41	6
Total in Shoes	..	35	7	Occupations not stated			
				(includes Married			
*Hosiery Trades	..	7	23	Women, Widows,			
Labourers	..	14	..	Children and Per-			
Clerks	..	3	2	sons of no occupa-			
Tailoring Trade	..	3	1	tion)	..	8	82
Vanmen	..	6	..				
Soldiers	..	1	..	Total	..	143	123
Engineers	..	10	..				
Painters	..	1	..				
Dressmakers	..	..	..				

\* A large number of *married* women are engaged in the Hosiery Trade, but these are not included, for in the case of deaths of married women and widows, only the husband's occupation is registered.

TABLE 7.

Showing the number of Cases notified of the principal Notifiable Diseases for the  
Fourteen Years, 1916-1929.

DISEASE.	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Smallpox ..	..	0	0	0	0	0	0	0	5	72*	0	6*	90*	320*
Scarlet Fever ..	..	647	573	583	579	946	714	619	335	774	477	620	1971	517
Diphtheria ..	..	115	128	154	272	471	324	168	429	350	366	309	461	253
Enteric Fever ..	..	9	3	34	30	15	27	9	5	4	3	3	6	2
Erysipelas ..	..	154	114	101	131	127	84	101	96	126	110	132	141	158
Puerperal Fever ..	..	16	4	6	11	18	21	12	11	7	22	9	10	11
Puerperal Pyrexia ..	..	..	..	..	..	..	..	..	..	..	21	34	45	25
Phthisis ..	..	..	655	746	658	572	497	566	725	606	650	700	668	657
Other Forms of Tubercle ..	..	..	98	82	47	59	105	43	65	77	77	80	117	77
Ophthalmia ..	..	67	66	51	101	101	87	66	28	37	36	38	24	35
Cerebro-Spinal Fever ..	..	7	4	2	4	7	4	0	2	2	4	4	4	8
Poliomyelitis ..	..	3	5	3	3	4	2	1	12	..	81	8	8	4
Measles ..	..	3807	4572	1686	262	(Notification discontinued.)								
Encephalitis Lethargica ..	..	..	..	..	9	9	10	6	22	26	14	9	7	4
Pneumonia ..	..	..	..	..	131	138	177	209	247	239	143	236	239	364
Chickenpox ..	..	..	..	..	..	..	..	..	..	639	..	..	..	..
Totals ..	4825	6222	3448	2098	2460	2013	1768	1859	1982	2959	2004	2188	3791	2435

\* The figures include cases discovered by the Medical Officer of Health.



TABLE 8.

Showing the number of Deaths from Zymotic (or Germ) Diseases in the Fourteen Years  
1916-1929.

DISEASE.	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Smallpox ..	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles ..	140	98	59	1	83	7	48	21	0	43	8	18	1	17
Scarlet Fever ..	2	3	5	2	2	1	7	2	4	10	5	3	4	2
Diphtheria ..	11	18	15	30	41	28	20	9	35	34	37	11	17	13
Whooping Cough ..	38	33	34	11	23	33	25	31	18	69	21	29	7	56
Enteric Fever ..	2	2	4	3	3	2	3	2	1	1	0	1	0	0
(Diarrhoea ..	34	21	15	23	21	30	16	38	62	57	40	22	50	27
(Enteritis ..	43	49	26	31	48	67	42	22	19	10	5	2	0	0
Erysipelas ..	7	5	1	6	0	5	1	2	8	10	9	5	0	0
Influenza ..	18	*	†	330	15	47	80	31	39	55	15	54	18	214
Puerperal Fever ..	5	0	6	4	8	6	5	3	3	7	11	2	7	3
Cerebro-Spinal Fever ..	7	2	1	8	6	3	3	0	0	3	5	2	0	4
Polionmyelitis ..	1	1	1	2	0	1	1	0	0	0	7	2	0	0
Encephalitis Lethargica ..	..	..	..	..	6	5	4	4	7	10	9	7	3	12
Pneumonia ..	..	..	..	..	225	207	224	210	218	245	168	208	187	284
Totals ..	308	162	126	451	481	442	479	375	409	554	350	366	294	632

N.B.—In calculating the Zymotic rate since 1923, all the above deaths have been included except pneumonia. Particulars of deaths from Tuberculosis are given in Tables 5 and 6.

\* Epidemic year. Deaths during epidemic, June to December, 877.

† Epidemic year. Deaths during epidemic, January to April, 1,279.

TABLE 9.—Vital Statistics of whole District during 1929 and previous years. City of Leicester.

YEAR.	Population estimated to middle of each year, revised in light of 1921 Census.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		Un-corrected Number.	Nett.	Number.	Rate.	Of Non-residents registered in the District.	Of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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												(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Number of inhabited tenements, July, 1929... .. 62,038 | Area of District in acres (exclusive of  
Average number of persons per house, Census, 1921 .. 4.28 | area covered by water) .. 8,582

NOTE.—This Table has been filled in in accordance with the instructions given on the form supplied by the Ministry of Health.

TABLE 10.

## LEICESTER BOROUGH.

Showing estimated Population, Marriage-rates, Birth-rates, and Death-rates (General and Zymotic) per 1000 living during the last 82 years, 1848-1929.

Year. (1)	Estimated Population. (2)	Marriage Rate. (3)	Birth Rate. (4)	Death Rate. (5)	Zymotic (Death) Rate. (6)	Infant Mortality. (7)
1848	57,705	20.86	34.71	25.77	5.87	
1849	58,736	21.58	36.96	28.73	7.05	
1850	59,788	24.04	37.45	23.64	4.13	
1851	60,760	21.11	40.11	25.57	5.48	
1852	61,467	22.96	38.83	28.84	8.42	
1853	62,181	22.90	36.71	27.02	5.45	
1854	62,903	20.40	39.06	25.11	6.65	
1855	63,624	19.14	36.16	23.55	2.87	
1856	64,366	20.02	37.32	21.16	3.10	
1857	65,119	20.60	37.48	27.58	8.19	
1858	65,835	19.14	34.54	28.76	8.07	
1859	66,663	22.56	37.77	24.59	4.99	
1860	67,456	19.80	38.05	20.47	1.27	
1861	68,638	18.58	37.01	25.25	5.71	
1862	70,986	21.30	38.07	23.38	3.01	
1863	73,413	25.74	40.00	29.95	7.96	
1864	75,922	25.68	41.01	26.96	5.41	
1865	78,516	25.38	41.09	25.02	5.20	208.9
1866	81,197	24.94	42.02	23.33	3.37	205.1
1867	83,970	22.18	41.66	24.59	4.31	226.2
1868	86,837	22.62	41.32	28.15	7.88	256.6
1869	89,804	21.12	41.87	25.60	5.10	229.0
1870	92,873	21.22	40.90	27.33	7.24	235.2
1871	95,823	23.06	41.55	26.07	5.83	252.4
1872	98,251	23.90	42.36	26.95	8.23	231.3
1873	100,741	24.00	44.14	23.83	5.05	208.4
1874	103,294	20.90	42.34	24.29	3.83	222.6
1875	105,913	22.36	40.31	27.28	6.56	242.0
1876	108,599	22.64	44.02	23.58	5.26	199.9
1877	111,355	21.24	42.68	23.48	3.21	188.7
1878	114,182	19.38	41.85	21.89	4.18	205.2
1879	117,083	19.48	40.11	22.64	3.06	187.3
1880	120,059	19.60	40.04	24.73	6.48	220.1
1881	123,146	18.66	38.26	21.55	4.45	204.8
1882	116,275	19.02	38.46	20.04	3.23	194.4
1883	129,483	18.64	37.26	19.18	2.56	190.7
1884	132,773	17.3	36.5	22.1	4.2	233.5
1885	136,147	16.3	34.3	19.3	3.3	193.5
1886	139,606	17.4	34.8	19.6	2.8	216.5
1887	143,153	16.6	32.7	19.1	3.0	215.8
1888	146,790	15.4	32.7	18.1	2.4	204.7

TABLE 10—Continued.

Year. (1)	Estimated Population. (2)	Marriage Rate. (3)	Birth Rate. (4)	Death Rate. (5)	Zymotic (Death) Rate (6)	Infant Mortality. (7)
1889	150,520	16.0	31.8	16.6	2.3	209.6
1890	154,344	16.5	30.4	17.7	2.1	203.7
*1891	†177,353	19.1	33.5	21.2	3.3	214.5
1892	180,550	16.7	32.2	18.0	2.5	197.7
1893	183,900	15.8	32.6	19.7	3.5	220.4
1894	187,250	16.7	32.0	14.5	1.9	161.9
1895	190,600	16.4	31.2	17.4	3.0	206.6
1896	194,100	17.5	32.0	16.8	2.9	185.7
1897	197,600	16.7	31.6	17.9	1.9	206.0
1898	201,250	17.7	30.5	17.2	3.4	191.1
1899	204,900	17.5	30.6	18.1	3.4	196.0
1900	208,600	17.3	29.7	17.8	3.6	174.1
1901	212,498	17.1	29.0	15.7	2.3	178.0
1902	213,974	16.3	29.5	14.8	1.5	153.3
1903	215,461	16.5	27.9	14.2	1.4	161.3
1904	216,958	17.0	27.5	15.0	2.0	161.1
1905	218,464	17.2	26.9	14.0	1.6	146.5
1906	219,980	16.1	26.6	15.1	2.4	166.2
1907	221,508	16.6	24.9	13.4	.9	130.1
1908	223,046	16.0	25.4	13.9	1.6	129.7
1909	224,595	15.7	24.1	14.0	1.3	126.6
1910	226,154	17.1	23.7	12.4	.7	126.3
1911	227,634	16.6	22.9	13.4	1.4	130.0
1912	229,294	16.3	22.5	13.5	.9	109.0
1913	230,970	16.4	22.8	13.3	.7	119.3
1914	232,664	16.7	22.1	14.1	1.1	119.9
1915	232,664	24.1	20.8	14.9	.5	122.8
1916	225,907	18.3	20.7	13.6	.8	104.8
1917	217,537	16.6	16.9	13.5	.7	105.0
1918	217,537	18.6	14.9	17.8	.5	108.1
1919	236,059	21.3	15.3	13.0	.3	98.0
1920	236,874	23.5	24.9	12.1	.8	89.4
1921	237,900	20.0	21.4	12.0	.5	85.9
1922	238,800	19.3	19.4	12.7	.5	87.8
1923	239,700	18.1	19.16	11.57	.4	84.0
1924	241,800	17.4	18.47	12.12	.7	79.0
1925	242,100	17.6	17.33	12.90	1.3	87.6
1926	241,700	16.9	17.02	12.30	.7	77.4
1927	245,000	17.6	16.18	12.42	.5	75.1
1928	246,000	18.99	16.21	11.17	.2	70.7
1929	245,200	19.17	15.29	13.94	1.3	80.3

\* All figures after 1891 refer to extended Borough.

† This is the population of the extended Borough. The figures in the other columns for the same year refer to the old Borough.

The figures since 1892 have been revised in the light of the census figures of the different census years—1901, 1911 and 1921. The population for the year 1920 having been considerably over-estimated has necessitated important corrections in that year.

TABLE 11. City of Leicester.

## INFANT MORTALITY DURING THE YEAR 1929.

Net Deaths from stated Causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.	Under 1 Week	1 to 2 Weeks	2 to 3 Weeks	3 to 4 Weeks	Total under 1 Month	1 to 3 Months	3 to 6 Months	6 to 9 Months	9 to 12 Months	Total Deaths under 1 Year
All Causes Certified.	89	19	11	1	120	47	57	41	36	301
Smallpox .. .. .	..	..	..	..	..	..	..	..	..	..
Chicken-pox .. .. .	..	..	..	..	..	..	..	..	..	..
Measles .. .. .	..	..	..	..	..	..	..	1	..	1
Spina bifida .. .. .	2	2	1	..	5	2	1	..	..	8
Whooping-cough .. .. .	..	..	..	..	..	3	5	3	4	17
Diphtheria and Croup .. .. .	..	..	..	..	..	..	..	..	..	..
Erysipelas .. .. .	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis .. .. .	..	..	..	..	..	..	1	2	2	5
Abdominal Tuberculosis .. .. .	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases .. .. .	..	..	..	..	..	..	4	..	..	4
Meningitis ( <i>not Tuberculous</i> ) .. .. .	1	..	1	..	2	..	3	..	3	8
Convulsions .. .. .	4	3	1	..	8	4	8	2	1	23
Laryngitis .. .. .	..	..	..	..	..	..	..	..	..	..
Bronchitis .. .. .	..	2	1	..	3	2	5	1	3	14
Pneumonia (all forms) .. .. .	1	..	1	..	2	12	12	22	14	62
Diarrhœa .. .. .	..	..	..	..	..	7	4	5	2	18
Enteritis .. .. .	..	..	..	..	..	2	3	..	3	8
Colitis .. .. .	..	..	..	..	..	..	..	1	..	1
Gastritis .. .. .	..	..	..	..	..	..	..	..	..	..
Syphilis .. .. .	..	..	..	..	..	..	1	..	..	1
Rickets .. .. .	..	..	..	..	..	..	..	..	..	..
Suffocation (overlying) .. .. .	2	1	..	..	3	1	2	..	..	6
Injury at Birth .. .. .	6	..	..	..	6	..	..	..	..	6
Atelectasis .. .. .	4	..	..	..	4	..	..	..	..	4
Congenital Malformations .. .. .	8	..	1	1	10	2	..	..	..	12
Premature Birth .. .. .	46	5	3	..	54	2	..	..	..	56
Atrophy, Debility and Marasmus .. .. .	8	5	2	..	15	6	2	2	1	26
Other Causes .. .. .	7	1	..	..	8	2	6	2	3	21

Net Births in the Year { legitimate, 3,514.  
 { illegitimate, 233.

Net Deaths in the Year of { legitimate infants, 276.  
 { illegitimate infants, 25.



TABLE 12.

# VENEREAL DISEASE.

Form V.D. (R.), as required by Ministry of Health.

Return relating to all persons who were treated at the Treatment Centre at Leicester Royal Infirmary during the year ended the 31st December, 1929.

	Syphilis.		Gonorrhœa.		Conditions other than Venereal.		Total.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1. Number of cases which—								
(a) at the beginning of the year under report were under treatment or observation for ..	155	182	248	86	11	4	414	272
(b) had been marked off in a <i>previous year</i> as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report <i>suffering from the same infection</i> .. ..	11	10	7	6	..	..	18	16
TOTAL—Items 1 (a) and 1 (b) ..	166	192	255	92	11	4	432	288
2 (a). Number of cases dealt with at the Treatment Centre during the year <i>for the first time</i> ..	151	101	325	165	158	80	634	346
TOTAL—Items 1 (a), 1 (b) and 2 (a) ..	317	293	580	257	169	84	1066	634
2 (b). Number of cases <i>included</i> in Item 2 (a) known to have received <i>previous treatment at other Centres</i> for the same infection .. ..	13	3	21	10	..	..	34	13



3. Number of cases which ceased to attend—

- (a) before completing the first course of treatment for  
 (b) after one or more courses but before completion of treatment for  
 (c) after completion of treatment, but before final tests as to cure of .. .. .
4. Number of cases transferred to other Treatment Centres after treatment for .. .. .
5. Number of cases discharged after completion of treatment and observation for .. .. .
6. Number of cases which, at the end of the year under report, were under treatment or observation for .. .. .

TOTAL—Items 3, 4, 5, and 6	317	293	580	257	169	84	1066	634
----------------------------	-----	-----	-----	-----	-----	----	------	-----

7. Out-patient attendances—

- (a) For individual attention by the Medical Officer .. .. .
- (b) For intermediate treatment, *e.g.*, irrigation, dressings, &c. .. .. .
- TOTAL ATTENDANCES .. .. .

	4056	3974	6288	2902	443	136	10787	7012
	352	124	5993	2553	38	8	6383	2685
	4408	4098	12281	5455	481	144	17170	9697

8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from .. .. .

	610	461	948	1836	..	281	1558	2578
--	-----	-----	-----	------	----	-----	------	------

9. Examinations of Pathological material—

- (a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre .. .. .
- (b) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory .. .. .

		For detection of			For Wassermann Reaction.	
		Spirochetes.	Gonococci.	Other Organisms.		
	165	5044	4	..	3581	..
	..	..	..	..	..	..

TABLE 12a.

# VENEREAL DISEASE.

Form V.D. (R.), as required by Ministry of Health.

Statement showing the services rendered at the Treatment Centre during the year 1929, classified according to the areas in which the patients resided.

	Leicester.	Leicester-shire.	Rutland.	Warwick-shire.	Northamptonshire.	Stafford-shire.	TOTAL.
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from:—							
Syphilis .. .. .	178	74	..	..	..	..	252
Soft Chancre .. .. .	..	..	..	..	..	..	..
Gonorrhœa .. .. .	395	95	..	..	..	..	490
Conditions other than Venereal .. .. .	159	79	..	..	..	..	238
Total .. .. .	732	248	..	..	..	..	980
B. Total number of attendances of all patients residing in each area .. .. .	21458	5409	..	..	..	..	26867
C. Aggregate number of "In-patient days" of all patients residing in each area .. .. .	2698	1438	..	..	..	..	4136
D. Number of doses of arsenobenzol compounds given in the:—							
1. Out patient Clinic .. .. .	2644	1312	..	..	..	..	3956
2. In-patient Department .. .. .	25	10	..	..	..	..	35
to patients residing in each area .. .. .							

TABLE 13.

VENEREAL DISEASE CLINICS AT ROYAL INFIRMARY.  
NEW CASES AND RENEWED ATTENDANCES. (City Cases only.)

YEAR.	NEW PATIENTS.				RENEWED ATTENDANCES.			
	MALES.		FEMALES.		MALES.		FEMALES.	
	SYPH.	GON.	SYPH.	GON.	SYPH.	GON.	SYPH.	GON.
*1917	101	138	79	99	696	1285	413	674
1918	125	184	166	90	1313	2759	1429	1058
1919	218	374	184	35	1934	4319	1741	631
1920	205	250	181	56	3426	5360	2081	812
1921	168	198	208	45	3707	4423	3030	944
1922	148	179	149	29	3725	4026	2456	1448
1923	111	198	123	66	3465	4859	2948	2279
1924	93	166	119	98	3595	5528	2516	2364
1925	66	202	72	84	3446	7228	2245	2143
1926	99	291	90	118	3123	8323	2143	2428
1927	70	275	75	102	3164	9761	2557	2591
1928	71	246	104	136	2946	10420	2970	3619
1929	125	266	80	126	3321	10085	2529	4372

\*Nine Months only.

TABLE 14.

## Cancer Statistics, 1903-29.

Year.	Total Cancer Deaths.	Cancer Deaths— per cent of Total Deaths.	Cancer Death- rate per 100,000 Population.
1903	192	6.2	89
1904	213	6.5	98
1905	180	5.8	82
1906	168	5.0	76
1907	199	6.6	89
1908	214	6.8	95
1909	195	6.1	86
1910	200	7.1	88
1911	236	7.7	103
1912	226	7.2	98
1913	252	8.1	109
1914	269	8.1	115
1915	219	6.4	94
1916	228	7.3	100
1917	255	8.6	117
1918	309	7.9*	132
1919	249	8.0	108
1920	257	8.9	104
1921	307	10.6	129
1922	276	9.0	116
1923	274	9.8	114
1924	281	9.5	116
1925	318	10.1	131
1926	395	13.2	163
1927	324	10.6	132
1928	349	12.7	142
1929	357	10.4	145

\* In 1918 the total deaths from all causes were very high so that the per cent. figure was proportionately lower.

TABLE 15. DEATHS FROM CANCER, 1929.

Classified according to Age, Sex and Organ Affected.

Organ Affected.	Under 40 years		40--60 years.		Over 60 years.		All Ages.	
	M.	F.	M.	F.	M.	F.	M.	F.
Lip .. ..	—	—	—	—	—	—	—	—
Tongue .. ..	—	—	5	—	4	1	9	1
Jaw .. ..	—	—	1	—	1	1	2	1
Mouth .. ..	—	—	1	—	—	—	1	—
Larynx .. ..	—	—	1	1	3	1	4	2
Oesophagus .. ..	—	—	6	1	13	3	19	4
Stomach .. ..	2	1	10	10	19	18	31	29
Intestines .. ..	1	1	—	—	—	2	1	3
Colon .. ..	—	—	4	1	5	18	9	19
Rectum .. ..	1	2	4	3	14	7	19	12
Liver .. ..	—	1	6	7	8	7	14	15
Pancreas .. ..	1	—	1	1	2	4	4	5
Spleen .. ..	—	—	—	—	—	—	—	—
Lungs .. ..	—	—	—	1	1	—	1	1
Kidney .. ..	—	—	—	—	—	—	—	—
Bladder .. ..	—	—	2	—	3	6	5	6
Prostate .. ..	—	—	—	—	12	—	12	—
Testicle .. ..	1	—	—	—	—	—	1	—
Ovary .. ..	—	—	—	3	—	3	—	6
Uterus .. ..	—	3	—	11	—	13	—	27
Breast .. ..	—	4	—	14	—	18	—	36
Bones .. ..	—	—	—	—	—	1	—	1
Other Forms or not specified .. ..	7	3	12	8	12	15	31	26
Total .. ..	13	15	53	61	97	118	163	194

TABLE 16.—Midwives practising in Leicester, 1929.

REG. No.	NAME.	ADDRESS.
* 63759	Allcock, Winifred .. ..	1 Spence Street.
* 32386	Adcock, Hannah .. ..	56 Clarendon Park Road.
† 2760	Blyth, Eliza .. ..	13 Fairfield Street.
* 42983	Baumber, Mabel .. ..	12 Portman Street.
* 70842	Blockley, Clara .. ..	58 Loughborough Road.
† 25564	Coe, Lizzie .. ..	103 Down Street.
† 73803	Carr, Beatrice .. ..	31 Linton Street.
* 57274	Camacho, M. S. .. ..	649 Aylestone Road.
* 74368	Carter, Marjorie .. ..	Sundial Nursing Home, Aylestone Road.
* 42330	Cook, Lilly Elizabeth .. ..	26 Deepdale.
§* 67186	Conlon, Elizabeth .. ..	Tweedbank, Bolsover Street.
* 36754	Dawkins, Jemima .. ..	1 Pool Road.
† 66243	Dodson, Sarah .. ..	35 Windley Road.
* 72670	Davis, Catherine .. ..	14 Uplands Road, Southfields Drive.
* 50887	East, Florrie .. ..	11 New Bridge Street.
* 43711	Else, Charlotte .. ..	Maternity Hospital, Causeway Lane.
† 67246	Eyre, Blanche .. ..	14 Lincoln Street.
§* 68879	Eden, Lily .. ..	5 Thoresby Street.
* 71229	Earl, Ivy .. ..	7 Tailby Avenue.
30974	Gawthorne, Fanny .. ..	45 Aylestone Road.
* 45160	Gardner, Gertrude .. ..	3 Elmfield Avenue.
§* 70991	Gill, Dorothy .. ..	1 Gedding Road.
* 15683	Gray, Jean .. ..	Maternity Hospital, Causeway Lane.
* 75166	Haynes, Nellie E. .. ..	19 The Newarke.
* 23308	Hulther, Maud Isabel .. ..	66 Uppingham Road.
* 27110	Hosking, C. A. .. ..	Maternity Hospital, Causeway Lane.
* 26452	Heggs, Mary Louisa .. ..	Maternity Hospital, Causeway Lane.
* 57414	Hill, Sarah .. ..	Maternity Hospital, Causeway Lane.
* 72155	Hill, N. .. ..	33 Severn Street.
† 25486	Hunt, Annie .. ..	166 Charnwood Street.
† 28009	Hill, Matilda .. ..	88 Knighton Lane.
5223	Howsam, Miriam .. ..	90 Sylvan Street.
† 37583	Hicks, Louisa .. ..	58 Bassett Street.
§* 60388	Harding, Laura .. ..	70 Lytton Road.
* 70351	Hurd, Hilda .. ..	34 Diseworth Street.
* 71043	Hopkins, Margaret .. ..	39 Hallam Crescent East.
* 55864	Holyoak, Elsie .. ..	187 Sheridan Street.
† 41739	Ingham, Adelaide .. ..	58 Loughborough Road.
* 51039	Jones, Gwen. .. ..	58 Loughborough Road.
* 47677	Kent, Ethel Annie .. ..	58 Loughborough Road.
* 4259	Kirk, Veronica .. ..	7 Conduit Street.
* 11389	Laughton, Annie .. ..	236 Clarendon Park Road.
* 51258	Ledger, Ellen .. ..	205 Birstall Street.
* 77108	Leman, Edna Doris .. ..	229 Melton Road.
* 69623	Langton, Ellen .. ..	27 Lorne Road.
1039	March, Charlotte .. ..	180 Grasmere Street.
† 49841	McCaull, Jane .. ..	10 Shaftesbury Road.
§* 67874	Martin, Rose .. ..	62 Earl Russell Street.
* 64981	Morgan, Eileen W. .. ..	193 Narborough Road.
* 65416	Nixon, Edith May .. ..	380 Fosse Road South.
† 30688	Noon, Lucy .. ..	1 Spence Street.
† 36784	Pilsworth, Maria .. ..	"Roma," Blackbird Road.
† 49911	Potter, Frances .. ..	10 Shaftesbury Road.
* 43317	Payne, Lilian .. ..	7 Gipsy Road.
† 67428	Pateman, Clara .. ..	20 Warwick Street.
* 72326	Payne, Letitia .. ..	193 Narborough Road.
* 67707	Phillips, M. .. ..	Sundial Nursing Home, Aylestone Road.
* 69226	Robertson-Ritchie, Ethel .. ..	15 Napier Street.
* 76023	Rose, Janet M. .. ..	Maternity Hospital, Causeway Lane.
† 67475	Runcorn, Gertrude .. ..	41 Walton Street.
* 67995	Shelbourn, E. W. .. ..	28 Chatsworth Street.
* 28446	Simister, E. Kemsey .. ..	36 Wood Hill.
* 75128	Smith, Lillie C. M. .. ..	Maternity Hospital, Causeway Lane.
† 55034	Smith, Mary .. ..	32 Narborough Road.
* 58618	Starnier, Emma .. ..	7 Warwick Street.
* 69730	Smith, Edith .. ..	16 Constitution Hill.
* 72390	Saunders, Rose .. ..	Waltham House, Saffron Lane.
* 70298	Turton, Marjorie .. ..	Sundial Nursing Home, Aylestone Road.
* 33774	Wakeling, Ada .. ..	26 Melton Road.
† 54561	Whinnett, Annie .. ..	40 Mill Hill.
* 24962	Wright, Catherine .. ..	193 Narborough Road.
† 73062	Wyles, Violet .. ..	48 Hartopp Road.

\* Holds Certificate of Central Midwives' Board.

† Holds Certificate of London Obstetrical Society.

‡ Trained at Maternity Hospital, Causeway Lane.

§ Trained at Municipal Maternity Home.



TABLE 17.

**MUNICIPAL MATERNITY HOME,  
WESTCOTES DRIVE.**

**Annual Statistics relating to Maternity Hospitals and Homes  
for the Calendar Year 1929.**

Number of Beds, 26.

1. Number of cases in the Home on 1st January, 1929 ..	18
2. Number of cases admitted during 1929 .. ..	504
3. Average duration of stay .. .. .	14 days
4. Number of cases delivered by—	
(a) Midwives .. .. .	362
(b) Doctors—	
Doctor engaged .. .. .	75
Doctor called in .. .. .	32
	— 107
5. Number of cases in which medical assistance was sought by the midwife with reasons for requiring assistance :—	
(a) Ante-natal.—Albuminuria, 4 ; dangerous varicose veins, 1 ; malpresentation for version, 7 ; hyd- ramnios, 1 ; contracted pelvis for induction, 5 ; A.P.H., 2 ; contracted pelvis for Cæsarian section, 2. .. .. .	22
(b) During labour.—Rigid perineum, 1 ; persistent “ occipito-posterior,” 2 ; complicated breech, 5 ; uterine inertia, 5 ; long second stage, 13 ; head not engaged, 3 ; exophthalmic goitre, 1 ; prolapse of cord, 2 ; foetal distress, 2 ; eclampsia, 1 ; acute nephritis, 1 .. .. .	36
(c) After labour (state separately number of ruptured perineums which required suture).—Melanchatia, 1 ; rise of temperature, 3 ; lacerated perineum, 16 ; P.P.H., 1 ; V.D.H., 1 ; adherent placenta, 2 ; thrombus, 3 ; heart attack, 1 .. .. .	28
(d) For infant.—Convulsions, 1 ; vomiting, 1 ; cellulitis of shoulder, 1 ; atelectasis, 1 ; ancephalic head, 1 ; oph. neon., 1 ; watery eyes, 5 ; feebleness, 2	13

TABLE 17—continued

6. Number of cases notified as—	
(a) Puerperal fever .. .. .	0
(b) Puerperal pyrexia (i.e., rise of temperature to 100.4° F. for 24 hours or its recurrence within that period) with result of treatment in each case.—	
1 transferred to Royal Infirmary (died) ..	
1 Transferred to Royal Infirmary for further treatment (recovered) .. .. .	
1 discharged in fairly good health .. ..	3
7. Number of cases of pemphigus neonatorum .. .	0
8. Number of cases notified as ophthalmia neonatorum with result of treatment in each case.—1 improved on discharge. To attend Royal Infirmary. .. ..	1
9. Number of cases of “inflammation of the eyes,” however slight.—To own doctor for treatment, 2; Improved before discharge, 3 .. .. .	5
10. Number of infants not entirely breast-fed while in the Institution with reasons why they were not breast-fed.—Insufficient secretion, 6; Mother too ill, 3; no secretion 1	10
11. Number of maternal deaths with cause .. ..	0
12. Number of foetal deaths (a) stillborn, and (b) within 10 days of birth and their causes—and the results of the post mortem examination if obtainable :—	
(a) Stillborn, 3; stillborn, macerated, 2 .. ..	5
(b) Anacephalic, 1; atelectasis, 1; respiratory failure, 1; bronchial pneumonia, 1; birth injuries, 1; prematurity, 1 .. .. .	6

*Special Note.*—IMMEDIATE INFORMATION should be sent to the Ministry of the following occurrences in the Institution, with a brief statement of the circumstances of each case :—

1. Every case of maternal mortality occurring in the Institution, or due to illness contracted in the Institution.
2. Every case of puerperal fever or puerperal pyrexia, whether nursed in the Institution or transferred to another Institution.
3. Every case of pemphigus neonatorum.

TABLE 18.

City of Leicester.

## MATERNITY HOME, WESTCOTES DRIVE.

Income and Expenditure for the Two Years ending  
31st March, 1930.

	Year 1928-29.	Year 1929-30.
<b>EXPENDITURE.</b>		
	£ s. d.	£ s. d.
Salaries .. .. .	748 14 11	823 0 11
Superannuation : Corporation's Contributions	54 5 11	51 10 4
Insurance .. .. .	38 19 2	40 6 9
Rates .. .. .	119 6 8	238 13 4
Furniture and Equipment .. .. .	62 16 4	113 15 7
Repairs, Painting, &c. .. .. .	238 16 2	39 10 11
Fuel, Light and Water .. .. .	491 3 0	515 2 7
Provisions .. .. .	1186 6 9	1087 15 3
Drugs and Medical Requisites .. .. .	232 18 2	159 8 3
Laundry and Cleaning Materials (excluding Wages) .. .. .	215 9 2	250 0 5
Garden and Grounds .. .. .	185 7 3	173 7 7
Clothing and Linen .. .. .	138 19 11	126 6 8
Lecture Fees, &c. .. .. .	128 10 6	113 7 6
Printing, Stationery, Postage and Telephone	72 4 11	37 0 10
Sundries .. .. .	34 16 5	48 16 6
Total Expenditure .. .. .	£3948 15 3	3818 3 5
<b>INCOME.</b>		
	£ s. d.	£ s. d.
Maternity Fees .. .. .	2467 0 6	2488 2 6
Training Fees .. .. .	162 0 0	161 14 6
Rent of Garages, &c. .. .. .	167 2 6	166 11 0
Sundries .. .. .	0 1 7	0 0 10
Contribution by Ministry of Health in aid of Training of Midwives .. .. .	75 0 0	90 0 0
Produce supplied by Garden to Institution	34 5 5	32 14 7
Total Income .. .. .	£2905 10 0	£2939 3 5
Net Cost (excluding Loan Charges) .. .. .	£1043 5 3	£879 0 0

ALFRED RILEY,

City Treasurer.

15th July, 1930.

TABLE 19.

City of Leicester.

## DAY NURSERY.

Income and Expenditure for the Two Years ending  
31st March, 1930.

EXPENDITURE.	Year 1928-29.			Year 1929-30.		
	£	s.	d.	£	s.	d.
Salaries .. .. .	679	18	8	709	8	6
Superannuation : Corporation's Contributions	29	8	7	30	6	6
Insurance .. .. .	26	17	1	27	16	4
Rent and Rates .. .. .	313	6	8	353	13	4
Furniture and Equipment .. .. .	68	1	10	110	5	4
Repairs, Painting, &c. .. .. .	117	3	11	59	19	1
Heating, Lighting and Cleaning .. .. .	201	8	10	222	7	0
Provisions .. .. .	605	4	8	658	3	4
Drugs and Medical Requisites .. .. .	8	10	0	9	11	2
Laundry .. .. .	97	5	10	110	11	5
Uniforms and Clothing .. .. .	83	3	6	96	10	11
Printing, Stationery, Postage and Telephone	9	8	6	12	7	3
Sundries .. .. .	39	7	3	51	10	3
	£2279	5	4	£2452	10	5
INCOME.						
	£	s.	d.	£	s.	d.
Maintenance Charges .. .. .	695	17	0	838	4	10
Contribution from Education Committee in respect of Mothercraft :						
Tuition .. .. .	150	0	0	150	0	0
Meals for School Girls .. .. .	66	9	6	76	4	6
Meals for Mothers .. .. .	24	1	6	30	4	0
	£936	8	0	£1094	13	4
Net Cost .. .. .	£1342	17	4	£1357	17	1

ALFRED RILEY,

15th July, 1930.

City Treasurer.

TABLE 20.

City of Leicester.

## INFANTS' MILK DEPOT.

Income and Expenditure for the Two Years ending  
31st March, 1930.

EXPENDITURE.	Year 1928-29.			Year 1929-30.		
	£	s.	d.	£	s.	d.
Salaries and Wages .. .. .	366	11	8	406	18	8
Superannuation: Corporation's contributions	17	6	8	17	19	8
Purchase of Milk, &c... .. .	2587	19	0	2585	12	6
Medical Requisites, &c. .. .	62	4	3	53	12	0
Rent, Rates and Insurance .. .	73	6	4	71	10	1
Fuel, Light and Water .. .	35	5	3	33	8	9
Telephone .. .. .	9	4	8	9	2	11
Printing, Stationery and Sundries .. .	34	14	2	38	12	5
Total Expenditure .. .. .	£3186	12	0	£3216	17	0
INCOME.						
Sale of Milk, Virol, &c. .. .	3163	16	9	3205	19	8
Proportion of Salary of Manageress charged to Maternity and Child Welfare Account ..	151	4	8	151	4	8
Total Income .. .. .	3315	1	5	£3357	4	4
Net Surplus .. .. .	£128	9	5	£140	7	4

ALFRED RILEY,

City Treasurer.

15th July, 1930.

TABLE 20a. City of Leicester.

# HOME PLACE SANATORIUM, HOLT.

Income and Expenditure for the Two Years ending  
31st March, 1930.

EXPENDITURE.	1928-29.			1929-30.		
	£	s.	d.	£	s.	d.
Salaries and Wages .. .. .	..	..	..	330	11	8
Superannuation : Corporation's Contributions ..	..	..	..	8	9	7
Insurance .. .. .	8	11	2	23	11	11
Medical Attendance .. .. .	..	..	..	84	11	9
Wages of Engineer and Gardeners .. ..	10	0	0	395	8	4
Rates and Land Tax .. .. .	..	..	..	88	0	5
Fuel, Light and Water .. .. .	1	0	10	121	9	9
Provisions .. .. .	..	..	..	628	9	4
Medical Requisites .. .. .	..	..	..	8	16	11
Laundry .. .. .	..	..	..	33	17	11
Buildings, &c.—Repairs and Painting ..	..	..	..	76	5	5
Upkeep of Grounds, &c. (excluding Wages) ..	..	..	..	167	12	6
Transport .. .. .	..	..	..	55	16	3
Travelling Expenses of Committee and Officials ..	..	..	..	53	2	0
Furniture and Bedding .. .. .	..	..	..	71	18	9
Crockery and Hardware .. .. .	..	..	..	31	6	1
Cleaning Materials .. .. .	..	..	..	12	17	0
Printing, Stationery and Telephone .. ..	..	..	..	30	10	4
Miscellaneous .. .. .	4	10	5	36	1	3
Total Expenditure .. .. .	£24	2	5	£2258	17	2
INCOME.						
Sale of Pigs .. .. .	..	..	..	59	10	0
Garden Produce (including supplies to Institution) .. .. .	..	..	..	123	18	1
Miscellaneous .. .. .	..	..	..	1	0	0
Total Income .. .. .	..	..	..	£184	8	1
Net Cost .. .. .	£24	2	5	£2074	9	1

ALFRED RILEY,  
City Treasurer.

15th July, 1930.



TABLE 21.

Monthly Rainfall and mean Temperature during 1929,  
as recorded at the City Mental Hospital.

Figures supplied by Dr. J. Francis Dixon.

MONTH.				Rainfall in inches.	Mean Temperature Fabr.
January	..	..	..	1.36	33.22
February	..	..	..	0.45	30.14
March	..	..	..	0.09	42.77
April	..	..	..	1.43	42.80
May	..	..	..	2.01	51.83
June	..	..	..	1.38	55.53
July	..	..	..	1.74	62.09
August	..	..	..	2.10	60.96
September	..	..	..	0.77	59.70
October	..	..	..	3.59	48.87
November	..	..	..	5.42	43.80
December	..	..	..	5.18	41.38

Total rainfall in 1929 .. .. 25.52 inches.

No. of days on which rain fell (.01 inches or more) .. 260

Rainfall in previous years.

				Inches of rain	No. of days on which rain fell	
1928	..	..	..	26.41	..	210
1927	..	..	..	32.59	..	210
1926	..	..	..	26.78	..	186
1925	..	..	..	23.06	..	175
1924	..	..	..	28.49	..	198
1923	..	..	..	25.03	..	201
1922	..	..	..	29.23	..	187
1921	..	..	..	19.03	..	136
1920	..	..	..	25.10	..	192
1919	..	..	..	30.98	..	191
1918	..	..	..	24.52	..	190

TABLE 22.

Showing Births, Vaccinations and Smallpox in Leicester, 1838-1929.

Year	Births	Vaccina- tions Regist'd Public and Pvt.	Small- pox Deaths	Small- pox Cases	Year	Births	Vaccina- tions Regist'd Public and Pvt.	Exemp- tions Granted	Small- pox Deaths	Small- pox Cases
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1838	1815	Not known	11	..	1884	4851	1763	..	..	6
1839	2024	..	50	..	1885	4683	1842	..	..	8
1840	1967	..	56	..	1886	4863	1122	..	..	1
1841	1972	..	31	..	1887	4695	471	..	..	10
1842	1942	..	..	..	1888	4814	314	..	..	22
1843	2035	..	..	..	1889	4796	172	..	..	..
1844	2087	..	9	..	1890	4699	131	..	..	..
1845	2197	..	164	..	1891	4790	92	..	..	..
1846	2213	..	12	..	1892	5816	133	..	6	38
1847	2005	..	1	..	1893	6006	249	..	15	320
1848	2003	..	31	..	1894	5995	133	..	..	8
1849	2171	1613	66	..	1895	5962	75	..	..	4
1850	2239	1240	5	..	1896	6212	86	..	..	..
1851	2437	1292	2	..	1897	6252	81	..	..	..
1852	2387	1637	52	..	1898	6152	92	..	..	..
1853	2283	1843	11	..	1899	6273	156	167	..	..
1854	2467	2275	..	..	1900	6207	343	598	..	..
1855	2301	1771	..	..	1901	6169	357	500	..	4
1856	2402	1771	1	..	1902	6313	1237	1500	5	18
1857	2441	1880	17	..	1903	6018	2487	1029	21	406
1858	2276	2026	53	..	1904	5981	1232	1044	4	307
1859	2518	1447	3	..	1905	5888	987	1112	..	5
1860	2567	1766	2	..	1906	5865	1073	1080	..	1
1861	2540	1614	1	..	1907	5534	1093	1256	..	..
1862	2723	1388	..	..	1908	5680	659	2401	..	..
1863	2937	1608	5	..	1909	5431	660	2367	..	..
1864	3114	1916	104	..	1910	5380	564	2335	..	..
1865	3226	1183	10	..	1911	5222	475	2964	..	..
1866	3412	1641	3	..	1912	5182	447	3173	..	..
1867	3496	1541	2	..	1913	5278	436	3391	..	1
1868	3588	3379	1	..	1914	5144	293	3438	..	..
1869	3760	3560	..	..	1915	4851	192	3812	..	..
1870	3799	3103	..	..	1916	4684	222	3931	..	..
				Not	1917	3688	193	3287	..	..
1871	3982	3230	12	known	1918	3246	146	2724	..	..
1872	4162	4458	346	..	1919	3774	154	2954	..	..
1873	4447	3692	2	..	1920	5905	201	5364	..	..
1874	4374	3764	..	..	1921	5097	234	4662	..	..
1875	4270	3527	1	1	1922	4646	173	4286	..	..
1876	4781	3426	..	..	1923	4593	284	4109	..	..
1877	4753	3653	6	12	1924	4468	260	4062	..	5
1878	4779	3372	1	8	1925	1197	283	3908	..	72
1879	4697	3146	..	..	1926	4119	234	3710	..	..
1880	4860	2886	..	1	1927	3965	172	3684	..	7
1881	4712	3417	2	6	1928	3988	192	3712	..	90
1882	4857	3106	5	29	1929	3747	192	3517	..	320
1883	4825	1958	3	12						

The figures in this Table prior to the year 1890 are taken from the Fourth Report of the Royal Commission on Vaccination, App. 3, Tables 5, 6 and 51.

In 1863-64, owing to the Smallpox epidemic which prevailed, there were 4,320 additional public vaccinations performed by the Medical Officers to the Guardians. These were chiefly vaccinations of children omitted in previous years. They are not included in the figures for the two years in question.

TABLE 23.

Vital Statistics of the 38 Large Towns (excluding London and residential towns round London) with populations of over 100,000, 1929.

TOWN	Population for 1929.	Birth Rate.	Death Rate.	Infant Mortality.	Diphtheria Death Rate.
*Brighton .. ..	148,800	13.3	13.8	54	0.13
Portsmouth .. ..	240,700	17.0	13.6	67	0.10
*Southampton .. ..	169,900	18.4	13.3	65	0.12
*Norwich .. ..	124,700	15.9	13.9	79	0.03
*Plymouth .. ..	194,500	16.3	13.5	62	0.12
Bristol .. ..	390,400	15.6	12.8	61	0.14
Stoke-on-Trent .. ..	279,700	18.9	14.6	103	0.04
*Wolverhampton .. ..	133,900	18.9	12.7	61	0.04
*Walsall .. ..	100,200	19.8	14.6	98	0.14
Birmingham .. ..	968,600	17.5	13.4	79	0.08
*Coventry .. ..	161,100	15.1	12.1	70	0.22
Nottingham .. ..	266,600	17.1	15.0	95	0.21
*Derby .. ..	140,600	17.2	13.3	70	0.12
*Stockport .. ..	127,600	13.3	13.2	82	0.02
*Birkenhead .. ..	159,200	18.6	12.9	84	0.02
Liverpool .. ..	872,600	21.6	14.8	95	0.15
*St. Helens .. ..	110,500	20.4	14.1	110	0.10
*Bolton .. ..	181,200	14.4	15.2	101	0.04
*Manchester .. ..	755,900	17.3	15.3	96	0.07
Salford .. ..	241,500	16.4	14.3	114	0.16
*Oldham .. ..	143,200	13.2	18.1	114	0.10
*Southend-on-Sea .. ..	111,200	12.5	12.4	61	0.03
*Blackburn .. ..	125,100	12.4	14.7	84	0.15
*Preston .. ..	127,100	15.5	13.6	97	0.04
*Huddersfield .. ..	113,000	12.8	14.6	78	0.05
Bradford .. ..	288,500	15.1	15.4	78	0.15
Leeds .. ..	476,500	15.6	16.3	96	0.05
Sheffield .. ..	515,440	15.5	12.8	87	0.07
Hull .. ..	297,600	20.5	15.2	107	0.12
Middlesbrough .. ..	132,000	23.6	16.7	98	0.02
*Sunderland .. ..	184,700	22.3	16.5	108	0.05
*South Shields .. ..	121,800	19.3	14.6	121	0.02
Gateshead .. ..	123,100	20.3	14.3	106	0.06
Newcastle-on-Tyne .. ..	281,500	18.2	13.3	83	0.04
Cardiff .. ..	226,800	17.3	12.5	84	0.13
*Rhondda .. ..	154,020	17.0	11.7	80	0.15
*Swansea .. ..	161,700	17.5	12.3	77	0.11
Average .. ..	—	17.0	14.0	86	0.09
†LEICESTER .. ..	246,000	15.2	13.6	81	0.05

\*Provisional figures only. From Registrar-General's Quarterly Return No. 324.  
 †These differ slightly from the corresponding figures calculated locally and used in the rest of this report.

TABLE 24.

ALTITUDE ABOVE SEA LEVEL AT DIFFERENT POINTS  
IN THE CITY OF LEICESTER.

					Feet above sea level.
North Evington Infirmary (just outside City Boundary)					330
Victoria Park	..	..	..	..	293
University College		..	..	..	286
Gilroes Cemetery		..	..	..	285
Western Park	..	..	..	..	271
Braunstone Park		..	..	..	267
Spinney Hill Park		..	..	..	264
Welford Road Cemetery	..		..	..	258
Isolation Hospital, Groby Road		..	..	..	258
Mental Hospital	..	..	..	..	244
Park Estate Building Site (Saffron Lane)	..				220-250
Abbey Park	..	..	..	..	175
Belgrave	..	..	..	..	165

The above levels are taken from "spot" levels written in Ordnance Survey Plans. Data supplied by City Surveyor.

TABLE 25

## CITY OF LEICESTER

*(As required by the Ministry of Health.)*

## HOUSING CONDITIONS

For year ended 31st December, 1929.

## GENERAL STATISTICS.

Area (acres)	..	..	..	..	..	8,582
Population (1929)	..	..	..	..	..	245,200
Number of inhabited houses (1921)	..	..	..	..	..	54,657
Number of families or separate occupiers (1921)	..	..	..	..	..	—
Rateable Value, 1st November, 1929	..	..	..	..	..	£1,574,790
(Reduced figure owing to de-rating: provisional)						
Sum represented by a penny rate	..	..	..	..	..	£6,993

## HOUSING.

Number of new houses erected during the year:—

(a) Total	..	..	..	..	..	1,428
(b) With State assistance under the Housing Acts:						
(i) By the Local Authority	..	..	..	..	..	396
(ii) By other bodies or persons	..	..	..	..	..	680

## 1.—UNFIT DWELLING HOUSES—INSPECTION.

(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	..	..	..	..	9,106
(2) Number of dwelling houses which were inspected and recorded under the Housing Consolidated Regulations, 1925..	..	..	..	..	849
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	..	..	..	..	18

(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found to be not in all respects reasonably fit for human habitation.. .. .	849
2.—REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.	
Number of defective dwelling houses rendered fit in consequence of informal action by Local Authority or their officers .. .. .	2,021
3.—ACTION UNDER STATUTORY POWERS.	
A— <i>Proceedings under Section 3 of the Housing Act, 1925.</i>	
(1) Number of dwelling houses in respect of which Notices were served requiring repairs .. .. .	70
(2) Number of dwelling houses which were rendered fit after service of formal notices :	
(a) By owners .. .. .	22
(b) By Local Authority in default of owners .. .. .	19
(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close .. .. .	0
B— <i>Proceedings under Public Health Acts.</i>	
(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied .. .. .	8,257
(2) Number of dwelling houses in which defects were remedied after service of formal notices :—	
(a) By owners .. .. .	319
(b) By Local Authority in default of owners .. .. .	11



C—*Proceedings under Section 11 of the Housing Act, 1925.*

(1) Number of representations made with a view to the making of Closing Orders ..	18
(2) Number of dwelling houses in respect of which Closing Orders were made ..	18
(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit..	0
(4) Number of dwelling houses in respect of which Demolition Orders were made ..	11
(5) Number of dwelling houses demolished in pursuance of Demolition Orders ..	44

TABLE 26.

**LIST OF  
REGISTERED NURSING HOMES,  
(INCLUDING MATERNITY HOMES.)**

ADDRESS.					NO. OF BEDS.
9 Mere Road	..	..	..	..	1
13 Beckingham Road	..	..	..	..	5
Central Nursing Home, 33 Severn Street	..	..	..	..	6
40 Farnham Street	..	..	..	..	2
229 Melton Road	..	..	..	..	7
Home of Twilight Sleep, 3 Elmfield Avenue	..	..	..	..	10
49 St. Barnabas' Road	..	..	..	..	2
56 Clarendon Park Road	..	..	..	..	9
32 Narborough Road	..	..	..	..	4
193 Narborough Road	..	..	..	..	9
*108 Humberstone Drive	..	..	..	..	1
66 Uppingham Road	..	..	..	..	4
2 Melbourne Street	..	..	..	..	1
"Coneston," Thoresby Street	..	..	..	..	2
38 Cromford Street	..	..	..	..	1
Maternity Hospital, Causeway Lane	..	..	..	..	26
58 Loughborough Road	..	..	..	..	6
348 Aylestone Road	..	..	..	..	11
Sundial Nursing Home, Aylestone Road	..	..	..	..	12
10 Shaftesbury Road	..	..	..	..	1
22 Vicarage Lane	..	..	..	..	3

\* Removed from Register in 1930.

TABLE 27.

## DIPHTHERIA IN LEICESTER.

Cases notified and deaths registered during each quarter  
during years 1922-29. (From Registrar General's  
Quarterly Report.)

Year	Quarter			Cases	Deaths	Case Mortality %
1922	First .. ..	..	..	—	—	—
	Second .. ..	..	..	38	5	13.1
	Third .. ..	..	..	24	2	8.3
	Fourth .. ..	..	..	33	1	3.0
1923	First .. ..	..	..	27	3	11.1
	Second .. ..	..	..	37	1	2.7
	Third .. ..	..	..	26	1	3.8
	Fourth .. ..	..	..	41	5	12.2
1924	First .. ..	..	..	57	7	12.3
	Second .. ..	..	..	36	5	13.8
	Third .. ..	..	..	76	7	9.2
	Fourth .. ..	..	..	252	14	5.5
1925	First .. ..	..	..	152	11	7.2
	Second .. ..	..	..	76	8	10.5
	Third .. ..	..	..	38	4	10.5
	Fourth .. ..	..	..	81	9	11.1
1926	First .. ..	..	..	94	18	19.1
	Second .. ..	..	..	92	12	13.0
	Third .. ..	..	..	82	4	4.8
	Fourth .. ..	..	..	99	4	4.4
1927	First .. ..	..	..	73	7	9.5
	Second .. ..	..	..	42	0	—
	Third .. ..	..	..	61	2	3.2
	Fourth .. ..	..	..	136	2	1.4
1928	First .. ..	..	..	134	5	3.7
	Second .. ..	..	..	84	7	8.3
	Third .. ..	..	..	138	6	4.3
	Fourth .. ..	..	..	107	2	1.8
1929	First .. ..	..	..	56	2	3.5
	Second .. ..	..	..	42	5	11.9
	Third .. ..	..	..	48	2	4.1
	Fourth .. ..	..	..	107	4	3.7

TABLE 28.

Deaths during 1929 of Persons belonging to City of Leicester as classified by the Medical Officer of Health according to Disease, Sex and Age-Period.

CAUSES OF DEATH.	Sex	All Ages	0—	1—	2—	5—	15—	25	45	65—	75—
ALL CAUSES .. ..	M	1673	182	40	54	35	57	168	457	388	29
	F	1744	119	35	40	35	74	198	417	384	44
1. Enteric fever .. ..	M	..	..	..	..	..	..	..	..	..	..
	F	..	..	..	..	..	..	..	..	..	..
2. Smallpox .. ..	M	..	..	..	..	..	..	..	..	..	..
	F	..	..	..	..	..	..	..	..	..	..
3. Measles .. ..	M	9	1	3	2	3	..	..	..	..	..
	F	8	..	3	2	2	..	1	..	..	..
4. Scarlet fever .. ..	M	2	..	..	1	..	..	..	1	..	..
	F	..	..	..	..	..	..	..	..	..	..
5. Whooping cough .. ..	M	22	7	5	10	..	..	..	..	..	..
	F	34	10	13	11	..	..	..	..	..	..
6. Diphtheria .. ..	M	7	..	..	3	3	..	1	..	..	..
	F	6	..	..	2	2	1	1	..	..	..
7. Influenza .. ..	M	86	2	3	1	..	2	7	35	21	..
	F	128	..	..	1	..	2	14	37	32	..
8. Encephalitis lethargica .. ..	M	7	..	..	..	..	1	3	1	..	..
	F	5	..	..	..	..	1	3	1	..	..
9. Meningococcal meningitis .. ..	M	13	6	..	1	5	1	..	..	..	..
	F	5	2	..	..	2	1	..	..	..	..
10. Tuberculosis of respiratory system .. ..	M	143	2	1	1	..	15	58	56	10	..
	F	123	..	..	3	4	36	60	18	1	..
11. Other tuberculous diseases .. ..	M	30	5	2	11	4	3	4	1	..	..
	F	23	1	2	2	7	4	4	2	1	..
12. Cancer, malignant disease .. ..	M	163	..	..	..	..	..	16	74	48	..
	F	194	..	..	..	..	1	24	81	65	..
13. Rheumatic fever .. ..	M	3	..	..	..	2	1	..	..	..	..
	F	1	..	..	..	1	..	..	..	..	..
14. Diabetes .. ..	M	8	..	..	..	..	1	..	2	4	..
	F	14	..	..	..	..	2	1	4	5	..
15. Cerebral hæmorrhage, &c. .. ..	M	118	..	..	..	..	1	4	40	42	..
	F	166	..	..	..	1	..	6	50	49	..
16. Heart disease .. ..	M	180	1	..	2	3	3	9	60	63	..
	F	260	4	..	..	4	6	24	71	68	..
17. Arterio-sclerosis .. ..	M	47	..	..	..	..	..	1	10	18	..
	F	26	..	..	..	..	..	..	4	14	..

TABLE 28—continued.

CAUSES OF DEATH.	Sex	All Ages	0—	1—	2—	5—	15—	25—	45—	65—	75—
18. Bronchitis .. ..	M	150	12	4	1	..	..	1	32	55	45
	F	171	4	2	..	1	1	2	40	52	72
19. Pneumonia (all forms) .. ..	M	157	39	11	16	5	7	16	32	20	11
	F	127	19	11	13	5	2	12	20	18	27
20. Other respiratory diseases .. ..	M	19	..	..	..	1	2	2	8	2	4
	F	21	..	..	1	..	..	1	8	5	6
21. Ulcer of stomach or duodenum .. ..	M	9	..	..	..	..	..	2	7	..	..
	F	9	..	..	..	..	..	1	6	2	..
22. Diarrhœa, &c. .. ..	M	13	10	2	..	..	..	1	..	..	..
	F	14	9	1	..	2	..	..	1	1	..
23. Appendicitis and typhlitis .. ..	M	14	..	..	1	2	2	1	4	3	1
	F	7	..	..	..	..	2	2	3	..	..
24. Cirrhosis of liver .. ..	M	9	..	..	..	..	1	1	5	1	1
	F	4	..	..	..	..	..	..	3	..	1
25. Acute and chronic nephritis .. ..	M	63	..	1	..	..	..	7	17	26	12
	F	43	..	..	..	..	1	3	21	11	7
26. Puerperal sepsis .. ..	M	..	..	..	..	..	..	..	..	..	..
	F	3	..	..	..	..	2	1	..	..	..
27. Other accidents and diseases of pregnancy and parturition .. ..	M	..	..	..	..	..	..	..	..	..	..
	F	17	2	..	..	..	6	9	..	..	..
28. Congenital debility and malformation, premature birth .. ..	M	84	80	4	..	..	..	..	..	..	..
	F	61	57	3	1	..	..	..	..	..	..
29. Suicide .. ..	M	21	..	..	..	..	..	4	14	2	1
	F	9	..	..	..	..	..	..	6	3	..
30. Other deaths from violence .. ..	M	69	6	4	2	3	11	13	13	12	5
	F	42	5	..	2	1	3	5	7	10	9
31. Other defined diseases .. ..	M	223	11	..	2	3	5	17	42	60	83
	F	219	5	..	2	3	3	24	34	47	101
32. Causes ill-defined or unknown .. ..	M	4	..	..	..	1	..	2	1	..	..
	F	1	1	..	..	..	..	..	..	..	..





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